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Gloucestershire County Council.

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# ANNUAL REPORT

OF

The Medical Officer of Health

FOR THE

ADMINISTRATIVE COUNTY OF GLOUCESTER

FOR 1935





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# Gloucestershire County Council

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## ANNUAL REPORT, 1935

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HEALTH DEPARTMENT,  
SHIRE HALL,  
GLOUCESTER,

17th November, 1936.

*To the Chairman and Members of the  
Public Health and Housing Committee.*

LADIES AND GENTLEMEN,

I regret that owing to pressure of work in other directions it has been impossible to complete the review of the records for 1935 until this late date. It forms my thirty-fourth Annual Report on the Health Services of Gloucestershire.

The general statistics call for no special comment, but the present records start a new series so far as the different parts of the County are concerned. This is occasioned by the re-division of the County under the Review Order and comparable records for individual districts (with certain exceptions) will not be available over a period of years for some time to come. It is by such comparison that useful indication can be obtained on the incidence of illness and death in different localities. The statistics have been analysed for two decennia, and if time allows, those for the fifteen years to 1935 will be examined similarly. This has been done for notifiable infectious diseases and a brief note will be found on the results on page 26.

The service in the County has sustained a loss by the death of Surgeon-Captain O. W. Andrews, C.B.E., R.N., who had been Medical Officer of Health for the West Gloucestershire United District from 1912. In the re-arrangement of County Districts, two other officers who had held office (one for about the same and the other for a shorter time) gave up their appointments: they are Dr. W. Sisam (Lechlade) and Dr. W. L. King (Stow-on-the-Wold U.D.).

A very important development during 1935 was the opportunity given to the County Council by the managers of Stoke Park Colony for the training of backward children. For many years they have provided accommodation for mentally defective persons, but they did not desire to be responsible to another Government Department than the Board of Control. However, to give greater advantage to their home County, the Managers applied to the Board of Education for approval of a section of the Colony and have provided a special school for fifty Gloucestershire children.

As usual the section dealing with Maternity and Child Welfare has been prepared by Dr. E. C. Morris Jones, the Maternity and Child Welfare Medical Officer.

I have the honour to remain,

Your obedient servant,

J. MIDDLETON MARTIN,

*County Medical Officer of Health.*

TABLE A, 1935.

## Health Staff of District Councils.

<i>Urban</i>		<i>Medical Officer of Health</i>		<i>Sanitary Inspector</i>	
Charlton Kings	...	...	A. Barrett Cardew	...	F. A. Middleton
Cheltenham	...	...	D. E. Morley	...	F. R. Jefford and Assistants
Cirencester	...	...	H. F. W. Adams	...	J. W. Armstrong
Kingswood	...	...	C. J. Perrott	...	G. E. Curtis
Mangotsfield	...	...	T. Aubrey	...	F. A. Long
Nailsworth	...	...	R. Green	...	T. Wood
Stroud	...	...	ditto	...	W. A. Hudson
Tewkesbury	...	...	T. H. Holroyd	...	W. Ridler
<i>Rural</i>					
Cheltenham	...	...	{ F. J. Lidderdale G. R. Cox T. H. Holroyd	...	{ E. H. Rosser L. Grogan
Cirencester	...	...	See Cirencester U.	...	A. T. Selvey
Dursley	...	...	ditto	...	W. H. Williams
East Dean	...	...	O. W. Andrews	...	A. W. Collinson
Gloucester	...	...	{ O. W. Andrews R. Green	...	{ O. M. Hale H. E. W. Hook L. Y. Whittingham
Lydney	...	...	See East Dean R.	...	{ G. J. Elliott W. M. Richards
Newent	...	...	W. M. Lucas Johnstone	...	W. F. C. Merrett
North Cotswold	...	...	J. E. Jameson	...	{ J. E. Busfield G. H. Cowles
Northleach	...	...	See Cirencester U.	...	A. S. Green
Sodbury	...	...	T. Rhind	...	{ W. H. Williams H. G. Hale
Stroud	...	...	See Nailsworth U.	...	D. E. Whittaker
Tetbury	...	...	See Cirencester U.	...	G. Hearsey
Thornbury	...	...	See Sodbury R.	...	{ F. W. Davies R. Huntingdon
Warmley	...	...	See Mangotsfield U.	...	W. H. Knee
West Dean	...	...	See East Dean R.	...	S. B. J. Davies

County Medical Officer of Health	J. Middleton Martin
Tuberculosis Officers (jointly with City of Gloucester) ... ..	W. Arnott Dickson (also Medical Superintendent, Tuberculosis Institution), E. D. D. Davies, F. H. Woolley
Maternity and Child Welfare Medical Officer	E. Catherine Morris Jones
Consultant Obstetricians, etc. (part time) ... ..	Hospital Staffs—Cheltenham, Gloucester and Bristol Hospitals, and Maternity Homes of Cheltenham and Gloucester District Nursing Associations
Venereal Diseases Officers (part time)	Hospital Staffs:—Cheltenham General Hospital, Gloucestershire Royal Infirmary, Stroud Hospital
School Medical Inspectors ...	T. F. H. Blake, Isabel R. Gordon
Ditto (part time)	H. F. W. Adams, R. Green, T. Rhind
County Dentists ... ..	Agnes M. Boal, Dorothy W. Crozier (resigned 31/8/35), M. M. Clerke (appointed 2/9/35), P. J. Wakley, B. F. Wren
Maternity and Child Welfare Centre Medical Officers (Part Time)	48 General Medical Practitioners
Ante-natal Clinic Medical Officers (part time)	5 General Medical Practitioners
Pathologists (part time) ... ..	Bristol—I. Walker Hall; Cheltenham—T. B. H. Haslett; Gloucester—E. N. Davey
Ophthalmic, Ear and Throat Surgeons	Hospital Staffs—Bristol, Cheltenham, Gloucester and Oxford Hospitals
Heart Physicians ... ..	Hospital Staffs—Cheltenham, Gloucester and Bristol Hospitals
Out-Station Medical Officers (part time)	48 General Medical Practitioners
Orthopædic Surgeons (part time)	Ethel M. Redman, J. S. Robinson, J. F. H. Stallman
Public Vaccinators (part time) ...	64 General Medical Practitioners
Veterinary Surgeons (whole time)	J. T. Taylor (appointed 19/12/35)
(part time)	16 General Veterinary Practitioners
County Analyst ... ..	R. H. Ellis, (also City Analyst)
Vaccination Officers (part time) ...	28 Officers
County Health Superintendents (whole time)	V. M. Bausor, I. V. Ladd, F. E. Lyne, E. Mason, J. I. McLauchlan, D. K. Palin, M. S. Payne
Orthopædic Nurses (whole time)	D. A. Rodenhurst, J. Shepherd. E. G. Bowden (appointed 23/4/35)
Dental Nurses (whole time) ...	M. Hunt, A. G. Powell, W. H. Roberts, E. E. Witchell
Health Visitors (whole time) ...	A. Somerfield, P. E. Watkins, L. Wright, E. H. V. Howse (appointed 15/6/36), E. N. James (appointed 18/6/36)
(part time)	137 District Nurses

## ARRANGEMENT OF COUNTY DISTRICTS.

In the last report (p. 9) was given the result of the re-grouping of the County Districts under Section 46 of the Local Government Act, 1929, under the "County of Gloucester Review Order, 1935," which came into effect on 1st April, 1935. Since that date the Minister of Health has issued a revised order "The County of Gloucester—Stroud Urban District Extension Order, 1936," effecting a further change: the most important is a very large extension of the boundary of the Stroud U.D., which will embrace, from 1st April, 1936, a big slice of the surrounding Rural District, as follows:

			Area in Acres		Population	
			Present	As Revised	Present	As Revised
Stroud U.D.	...	...	1,168	2,786	8,364	13,253
Stroud R.D.	...	...	37,222	35,038	27,405	22,439

This revision reduces Stroud R.D. from being the most populous Rural District to the second place.

## HEALTH STAFF.

The list of persons undertaking health services on behalf of the County Council during 1935 is set out on page 8.

In May, 1935, Surgeon-Captain Andrews, the Medical Officer of Health for the West Gloucestershire United Districts, had a serious illness, but he resumed his duties in August and was carrying on his work up to 12th March, 1936, dying suddenly the following day. In the Navy, Surgeon-Captain Andrews had a distinguished career and became Medical Officer of Health for this area in 1912 at a time when he might well have claimed rest as a reward for his naval service; on the outbreak of the Great War he returned to the sea and gave nearly five years more of his life's work to naval duties. In 1919 he resumed his civil office, and has carried out his duties for the past seventeen years in a painstaking thorough manner with meticulous attention to detail.

Following the re-arrangement of districts under the "County of Gloucester Review Order, 1935," Dr. L. W. King, the Medical Officer of Health for the former Stow-on-the-Wold Urban District retired after fourteen years' service, and with the detachment of the parish of Lechlade from the Faringdon R.D., Dr. W. Sisam severed a connection of twenty-three years with the public health work of this County.

The re-grouping of the districts has left other areas with three Medical Officers of Health in one case and with two officers in another, and it is understood that they will continue to act until effect is given to the combinations of districts for the appointment of whole-time officers.

## VITAL STATISTICS

As mentioned in the report for the previous year, the statistics there given were the last of a series spreading over thirty-five years with only comparatively small changes in the boundaries of a few districts. The records for two of the decennia have been analysed and the material is available for a similar examination of the records of 1920-35 when time allows. It is only by careful study of statistics—especially for such small areas as most sanitary districts are—over a long period that useful information as to the incidence of diseases can be gained, and from this point of view it is unfortunate that the present series of records has been broken. With the revision of the boundaries of districts as from 1st April, 1935, a new series starts but it will be many years before they will yield even the scanty information in detail which it seemed possible to glean from the records of twenty years which were summarized briefly in the Report for 1925. The general statistics for the County as a whole, however, will not be affected seriously by the minor changes in the County boundary and it will be practicable to continue the main tables given in the following paragraphs.

### BIRTHS.

The number of births registered during 1935 was 4,818, the highest number in any year since 1931: the birth-rate was 14.5 per 1,000 of the population. The rise is observed in both urban and rural districts as shown in the following statement:

	1935	1934	1933	1932	1931	1926-1930	1921-1925	1916-1920	1911-1915	1906-1910
Urban* ... ..	13.5	12.6	12.4	12.7	12.9	13.5	16.7	16.7	18.1	20.8
Rural* ... ..	15.2	14.5	13.8	14.7	15.4	15.7	18.4	17.9	19.8	22.4
Administrative County ... ..	14.5	13.8	13.4	14.0	14.6	15.0	17.9	17.6	19.3	21.8
England and Wales	14.7	14.8	14.4	15.3	15.8	16.7	19.9	20.1	23.6	26.3

\* Grouping revised from 1st April, 1935.

It should be noted that the group of urban districts contained in 1935 only eight areas : formerly the number was fourteen, but in the re-arrangement of County Districts under the Review Order, six Urban Districts (Awre, Coleford, Newnham, Stow-on-the-Wold, Tetbury, and Westbury-on-Severn) were absorbed by neighbouring Rural Districts as from 1st April, 1935. These districts had populations ranging from 1,025 to 2,876 and in the aggregate the reduction in the urban population is only about 10,000.

In previous reports attention has been drawn to the gradual approximation of the birth-rate and death-rate, and in 1931-3 the natural increase, as will be seen from the following figures, was less than 1 per 1,000 instead of nearly 10 per 1,000 in 1901-5.

			Birth Rate	Death Rate
1901- 5	...	...	23.8	14.1
1906-10	...	...	21.8	13.3
1911-15	...	...	19.3	13.4
1916-20	...	...	17.6	14.4
1921- 5	...	...	12.9	12.4
1926-30	...	...	15.0	12.6
1931-33 (3 years)	...	...	14.0	13.1
1934	...	...	13.8	12.8
1935	...	...	14.5	12.4

In the past two years there has been a slight recovery in the birth-rate and for the moment the tendency of the population to become a stationary or falling factor has been stayed, though the margin of increase is small.

#### DEATHS.

The number of deaths registered during 1935—4,138—was the lowest since 1930, when the number was 4,011; the general tendency of the death-rate to fall is indicated in the following table :

	1935	1934	1933	1932	1931	1926- 1930	1921- 1925	1916- 1920	1911- 1915	1906- 1910
Urban* ...	12.9	13.6	14.8	13.7	14.2	13.2	13.6	15.1	14.2	14.1
Rural* ...	12.2	12.4	12.3	12.6	12.6	12.3	11.9	14.1	13.0	12.9
Administrative County	12.4	12.8	13.2	13.0	13.2	12.6	12.4	14.4	13.4	13.3
England and Wales	11.7	11.8	12.3	12.0	12.3	10.3	10.9	13.4	13.7	14.4

\* Grouping revised from 1st April, 1935.

An interesting corollary to this statement is given by a comparison of the proportions of deaths occurring in different age-groups :

		Under 1 Year	1-5 Years	5-15 Years	15-25 Years	25-65 Years	Over 65 Years
1901-10	...	15.0	6.0	3.1	4.0	29.3	42.6
1911-20	...	10.2	4.4	3.5	4.4	31.8	45.8
1921-30	...	7.2	2.7	2.3	3.6	30.8	53.5
1933	...	4.9	1.6	1.2	2.9	30.8	58.7
1934	...	5.4	1.6	2.1	3.0	30.6	57.2
1935	...	4.5	1.2	1.6	2.4	32.1	58.2

Two points are brought out by this statement. One is that the saving of life of infants under the age of one year is not restricted to that group, but that it is accompanied by marked reduction in the mortality at ages 1-5 years and—to a less degree—at ages 5-15 years. The second is that there is great increase in the proportions of deaths at ages over 65 years, and a smaller increase at ages 25-65 years : if the latter group is divided into two decennial periods, it is seen that the slight increase has occurred in the upper twenty years and that in the group 25-45 years there has been a small decrease.

Further information is given by a similar analysis of the conditions to which the deaths of persons have been attributed, and a general statement of the result is given in the following table :

		1901 -10	1911 -20	1921 -30	1931	1932	1933	1934	1935
Acute Infections	...	3.7	3.5	1.9	1.5	.9	.7	1.6	1.0
Influenza	...	1.8	4.2	3.9	3.3	3.9	5.8	1.4	1.8
Tuberculosis	...	8.6	8.0	6.6	5.6	4.9	5.0	5.3	4.9
Cancer	...	7.1	9.1	11.9	13.3	12.6	12.4	12.9	12.8
Heart Disease	...	—	11.9	17.8	22.9	24.9	25.5	26.4	27.8
Respiratory Disease	...	14.7	13.5	11.4	10.2	8.4	8.5	9.0	7.5
Diarrhoea, etc.	...	2.2	1.3	.6	.6	.3	.2	.2	.4
Alcoholism	...	.9	.8	.3	.4	.4	.2	.3	.2
Nephritis	...	—	2.9	3.1	4.4	3.8	3.6	3.8	3.6
Parturition	...	.7	.6	.5	.5	.7	.5	.5	.5
Congenital Conditions	...	2.9	4.6	3.7	3.7	3.6	3.1	3.6	3.1
Violence and Suicide	...	3.6	3.3	3.7	4.3	4.4	4.1	4.1	4.7
Other	...	53.7	36.3	34.7	29.2	31.4	30.5	30.9	31.6

As mentioned last year, the most striking facts in this statement are the reductions in the proportions of deaths attributed to acute infections (scarlet fever, diphtheria, etc.), tuberculosis and respiratory diseases ; cancer and heart diseases bulk more and more in the list. The three former groups affect very largely persons of younger ages, while the two latter are in chief measure troubles of the old.

It has been noted in previous reports that a beginning has been made in the special care by the County Council of persons suffering from cancer and heart diseases. As regards the latter provision has been made for many years for the examination of children by the group of physicians associated with the Bristol University Centre for Cardiac Research, and their reports have been very useful in providing suitable care for the respective children. On the opening of the Radium Centre for the treatment of cancer, arrangements were made in 1931 for the treatment of a few patients from this County who required assistance in order that they might have the benefit : it is hoped that the opportunities will be widened and especially that persons may be brought under treatment at early stages.

#### INFANTILE MORTALITY.

For the first time in the period of public health records available (since 1901) the number of deaths of infants was below 200 : the actual number was 186, a rate per 1,000 births of 39. The next lowest figure was 48 in 1933. The steadily improving rate from 98 in 1901-5 is shown in the following table ; the average for 1931-5 was 48.

	1935	1934	1933	1932	1931	1926-1930	1921-1925	1916-1920	1911-1915	1906-1910	1901-1905
Urban*	41	56	52	60	55	58	68	69	87	95.5	111
Rural*	38	47	46	46	54.5	52	53	66	77	75	92.5
Administrative County	39	50	48	50.5	55	54	55	67	80	81	98
England and Wales	57	59	64	65	66	68	76	90	110	117	138

\* Grouping revised from 1st April, 1935.

#### WELFARE OF THE BLIND

Between 1923 and 1931 the number of blind persons on the register increased from 561 to 698 ; since 1931 the numbers have decreased fairly steadily to 619. In the earlier years persons were accepted as blind from various sources of information, but before any individual is added to the register now, a certificate of blindness within the meaning of the Blind Persons Act, 1920, is obtained from an ophthalmic surgeon. Further, persons who were included without such a certificate are being reviewed gradually ; thus 112

were examined in 1934 and 92 were certified blind ; in 1935, 56 of these were retained on the register. The total number removed during the past four years, some owing to the vision being improved, is 42.

Persons with partial vision are kept under observation with a view to appropriate help in the way of glasses, etc., and assistance being given when they become technically blind.

Percentages of all Blind Persons in Age Groups.

			Registered Persons.		Age at which Blindness occurred	
			1923	1935	1923*	1935
0—5	...	...	.9	.5	30.2	15.1
6—20	...	...	9.6	3.5	10.1	7.1
21—50	...	...	29.75	17.0	23.65	26.1
Over 50	...	...	59.7	79.0	31.55	51.6

\* In 29 cases the age was not known.

The voluntary County Association, which is the agent of the County Council for the Care of the Blind presented its fourteenth Annual Report for the year 1935-36, and the following extracts bring out clearly the value of the personal service rendered by the voluntary workers :

MRS. PAGE.—At the end of June last year Mrs. Page informed the Committee that she wished to be relieved of the position of Honorary Secretary as she found the increasing work was taxing her strength, and she was greatly in need of a rest. The Committee was most anxious to retain Mrs. Page's services and tried hard to persuade her to reconsider her decision, but this she was unable to do and her resignation took effect on 30th September last. For seven years Mrs. Page devoted her life to the service of the blind in the County without any remuneration whatsoever. It was indeed a severe blow to the Association, and to the blind themselves, when her resignation became known, and her loss is greatly felt.

During her period as Honorary Secretary Mrs. Page saw the work for the welfare of the blind grow in every way, and not a little of its success is due to her untiring energy and cheerfulness on all occasions. Her visits to the blind people in their homes were always greatly looked forward to, and she has left very fond personal remembrances in all their homes.

SECRETARY.—The Committee has pleasure in announcing that Mrs. Elsie Fuller, who has had several years experience of Social Work in London, was appointed to succeed Mrs. Page on 1st October last.

## REGISTRATION.—

Total on Index on 31st March, 1935	...	...	603
Loss by death	...	...	63
Removals from County	...	...	10
New cases	...	...	59

During the year 56 cases were certified by Ophthalmic Surgeons as being “Blind Within the Meaning of the Act,” while a sum of £3 17s. 11d. has been spent in the Prevention of Blindness. One hundred and forty-two cases of partial blindness are kept under constant observation.

EDUCATION.—There are three blind children under five years of age in the County ; one of them born in October of last year is in a Sunshine Home thanks to the generosity of Gydes Trust. The parents of the other two children refuse to allow them to leave home, although in one case there is great hope that the parents will be more reasonable. Of the 15 children under 16, nine are at Blind Schools, one is in a mental asylum, one is epileptic and paralysed, one (a cripple boy) has special instruction given him by his bedside and is making steady progress : one has a blind tutor at his home and is being helped by the Board of Education and Gydes Trust, while the parents of the remaining children refuse to allow them to go to Blind Schools at present.

Of the six children between the ages of 16 and 21, one is a journeyman at Cheltenham Workshops for the Blind, one is a trainee, and the remaining four are unfit for training.

GLOS. FUND FOR THE BLIND.—For the second year in succession the Association has received a sum of approximately £1,000 as a result of the collection undertaken by Mr. King Cummings on behalf of the joint fund of the Gloucestershire County Association for the Blind and the National Institute for the Blind. This is an excellent achievement and much credit is due to Mr. King Cummings and his staff for their splendid work. The actual amount received this year is £998 3s. 10d.

GRANTS AND PENSIONS.—Once more the Committee expresses its deep gratitude for the pensions and grants received from various Societies for the Blind. Gydes Trust, in addition to paying the fees of the blind baby born in the County last year, has again given a donation of £50 for the care of blind children.

Received during the year :

Clothworkers' Company	...	...	...	2
Gardners' Trust for the Blind	...	...	...	4
Hetherington Pensions	...	...	...	7
Painters' Company	...	...	...	1
Sir Beachcroft Towse' Ex-Service Fund	...	...	...	1

HOME TEACHING SERVICE.—There has been a slight alteration in the Home Teachers' areas and Miss Bedford now has 171 Blind and 48 Watch cases ; Miss Hobbs 167 Blind and 32 Watch cases ; Miss Saleby (half-time) 89 Blind and 18 Watch cases ; and Miss Wynn Lloyd 173 Blind and 44 Watch cases.

NECESSITOUS BLIND.—The Case Committee which meets every Quarter considers approximately 200 cases at each meeting. Grants amounting to £2,345 5s. 4d. have been administered by nearly 100 Almoners to whom the Committee extend their sincere thanks for their valuable work. Of this sum, £275 4s. 0d. has been granted to sighted dependants of Blind Persons.

HONORARY AUDITOR.—In view of the transfer of all Blind Public Assistance cases to the Association, and the granting of such relief being subject to County Council's sanction, the Honorary Auditor, Mr. K. Irving Brown, felt that the work should be done officially by the County Council and tendered his resignation to the Committee. Mr. Brown's resignation was accepted with great regret and the thanks of the Association are due to him for his splendid work in the past.

JUBILEE SERVICE.—A Service of Thanksgiving for the Silver Jubilee of His Late Majesty King George V was held in Gloucester Cathedral on Thursday, 27th June, 1935.

About 700 blind people, their helpers and friends were present and the Address was given by Canon Bolam of the National Institute for the Blind. The hymns were " Praise my soul the King of Heaven " and " Praise to the Holiest in the Height." The Anthem, " Oh for the Wings of a Dove " was beautifully sung by the Cathedral Choir.

Before the Service all who wished were taken round the Cathedral. Braille plans were used by those needing them. The parties were conducted by the Venerable Archdeacon of Gloucester, Canon Maynard Smith and others. Their interesting explanations of the beautiful building were much appreciated by everyone.

After the Service tea was provided for the blind and their guides at the Shire Hall and College Green.

Through the great kindness of friends who provided transport, all the blind in the County who were well enough to come were able to do so.

SALES OF WORK.—The Sales of Work are a great source of encouragement to those blind people who work in their homes. The fact that their work was appreciated and saleable is a great incentive to future work.

Most successful Sales were held at Taynton House (lent by the Misses Atherton) when £21 14s. 6d. was taken ; at Birchamp, Newland (lent by Mrs. Roscoe) when £29 6s. 2d. was taken : and the splendid sum of £43 11s. 5d. was the result of the Sale held at Upton Grove, Tetbury, by kind permission of Miss Bainbridge. Women's Institute Sales resulted in £22 10s. 3d. at Frampton-on-Severn and £5 18s. 1d. at Broadwell Manor. A Stall at the Three Counties Show at Gloucester resulted in £25 19s. 6d., at the Cheltenham Rose Show, £8 6s. 0d., and the Littledean Flower Show £2 8s. 6d. making a total for the year of £160 18s. 4d.

**SOCIAL CENTRES.**—The Committee owes a great debt of gratitude to all those kind friends who provide entertainment and happiness by these monthly social gatherings. This most important part of blind welfare work is much appreciated by the blind themselves. The Parties given by “Toc H” and the Dickens Fellowship were once again a great source of pleasure to the blind.

**WIRELESS FOR THE BLIND.**—A special note is included by Miss G. M. Kernaghan, the Honorary Secretary for this Section of the County Association's activities. She notes that in addition to the 200 sets loaned and maintained by Mr. Helmut Schröder, there are now 74 extra sets lent by the British Wireless for the Blind Fund and the local committee, which are working satisfactorily and maintained by the users.

During the year 43 free licences were issued, and 33 cancelled, the latter on account of death or removal.

St. Dunstan's have now taken over the installation and care of all sets owned by their men.

#### CHEL TENHAM WORKSHOPS FOR THE BLIND.

**REPORT FOR THE YEAR ENDED 31ST MARCH, 1936.**—The number of Workers remains the same and in spite of a reduction in the sales from £1,137 to £1,032, there has been enough work to keep everyone fully employed. Much of the work has consisted of repairs of an unremunerative nature. A fair number of orders have been received from Public Bodies, though the Committee are of opinion that more might be forthcoming from that source.

Mrs. Fuller, Secretary of the County Association for the Blind, has taken the place of Mrs. Page on the Committee.

It is intended to take an early opportunity of making some improvement in the remuneration of the Workers.

## **THE CARE OF THE DEAF AND DUMB.**

It was mentioned last year that that was the first occasion on which a section appeared in the annual report dealing with this group of the community and that the County Council had agreed to make grants to the Bristol and Gloucester Missions for the Deaf and Dumb to enable them to enlarge their work in the placement of persons in employment. From the reports which have been received from the the missionary of the Gloucester Association for the Welfare of the Deaf and Dumb, very considerable success has resulted from his efforts as will be seen from the following report by Mr. Illingworth, who is Lay Missioner.

Owing to the seasonal nature of the occupations in which many of the deaf and dumb are engaged, and that during the winter months they are liable to lose their jobs, on this account, the number unemployed has increased to six, in comparison with the summer months, when two only were known to be unemployed. Repeated efforts have been made to obtain work for them, but the task is very difficult, and demands many visits being made on behalf of each one, interviewing possible employers, etc., especially is that the case in the country districts.

It is regretted that the Bristol Missioner died in 1935 and no report is available.

On the preventive side, valuable work is undertaken by the Medical Services Committee in the treatment of conditions among children which might result in deterioration of hearing and eventual deafness at a comparatively early age.

## **SCHEME FOR THE EXTENSION OF MEDICAL SERVICES.**

On 7th July, 1919, the County Council adopted a scheme under which treatment services which could be provided by different Committees separately were co-ordinated and arranged by a special body originally known as the Board of Management, now the Medical Services Committee. Under this scheme the treatment of children, above and below school age, is undertaken at 29 centres in or on the borders of the County, including 5 large hospitals, 13 smaller hospitals and 11 special buildings or out-stations built by the County Council. The doctors giving treatment are the local medical practitioners and for special treatment, members of the visiting staffs of the large general hospitals; at the hospitals, nursing services are provided by their staffs and at the out-stations this assistance is obtained as far as possible from the District Nurses.

The County now has experience spreading over fifteen years and the co-operation of the voluntary and local medical and nursing personnel in the treatment work of the County Council has proved very happy throughout the whole period. The range of service included in the scheme is limited at present, but it provides a framework spreading over the County on which other branches of medical service can be grafted, and, when full effect is given to the aims of the Local Government Act in this County, it will be practicable economically to increase the number of centres so as to make them even more convenient for the population of the County.

In the early years of the scheme the number of cases and of attendances increased very rapidly, but now that the arrears of work have been overtaken a more or less normal stage has been reached with about 3,000 cases per year, making 20,000 attendances.

A brief comparison of the work done and its cost in 1923 and 1935 is given in the statement overleaf :

## TREATMENT SERVICES.

	1923	1935
No. of Out-Stations	8	18
Openings :		
Weekly ... ..	407	880
Intermediate ... ..	—	1068
	407	1948
No. of Cases :—		
School Children ... ..	1566	5998
Tuberculosis ... ..	111	485
M. & C.W. ... ..	177	1002
	1854	7485
Attendances :—		
School-children ... ..	4239	18449
Tuberculosis ... ..	548	1627
M. & C.W. ... ..	438	4071
	5225	24147
Average attendances per opening	12.3	12.4
Special Services :		
Surgeon's Visits ... ..	63	261
Cases—Vision ... ..	692	1979
Ear, Nose & Throat	374	1719
Orthopaedic	25	1750
Heart ... ..	—	132
	1091	5580
Operations ... ..	297	876
COSTS :—		
	£ s. d.	£ s. d.
Special Services :—		
Operations ... ..	391 19 0	1009 7 6
Examinations ... ..	605 8 0	1730 3 7
	997 7 0	2739 11 1
Medical Officers ... ..	723 9 0	1286 15 6
Other ... ..	1051 9 10	3188 6 2
	2772 5 10	7214 12 9
Orthopaedic ... ..	—	3214 6 7
	2772 5 10	10428 19 4
Average cost (in shillings)		
Total cost (less ortho- pædic) per attendance	10.4	5.11
Medical officers per attendance ... ..	2.9	1.0
Special services per case	11.1	7.7

## ORTHOPÆDIC TREATMENT.

The opportunities offered by the scheme of the County Council were enlarged at the beginning of 1935 by an increase in the number of Orthopædic Nurses from two to three, and the resulting benefit is indicated in some measure by the records summarised in the table below.

The actual number of cases under review during the year was 926, the highest in any year from the time the scheme reached its present form seven years since. The main increases in numbers occur under the headings of flat feet, bow legs and knock knees and, speaking generally, they now come under review at early stages when much can be done by simple remedial treatment. The addition of a third Orthopædic Nurse enables the intermediate treatment to be given more effectively.

Reports on the work of 1935 are presented by the three Orthopædic Surgeons for the Bristol, Cheltenham and Gloucester Hospital areas.

The following statement sets out a comparison of the work undertaken in 1927 and 1935 :

<i>Out-Station</i>			<i>For examination by Surgeon.</i>		<i>For treatment by Nurse.</i>	
			1927	1935	1927	1935
Berkeley	...	...	74	111	217	314
Chipping Campden	...	...	69	51	220	139
Chipping Sodbury	...	...	—	82	—	196
Cinderford	...	...	125	152	234	689
Cirencester	...	...	120	124	228	379
Coleford	...	...	—	132	—	708
Fairford	...	...	—	63	—	82
Lydney	...	...	59	263	75	499
Newent	...	...	—	81	—	417
Northleach	...	...	—	—	—	78
Soundwell	...	...	—	102	—	344
Stroud	...	...	—	154	—	382
Tewkesbury	...	...	62	83	322	486
Thornbury	...	...	32	56	46	248
Wotton-under-Edge	...	...	—	—	—	160
Totals	...	...	541	1,454	1,342	5,121

A very unusual feature during the year was the occurrence of a group of cases of Infantile Paralysis in the north-east of the County, and a smaller group in the Forest of Dean, both in the Autumn. A special note on these groups appears on page 29.

## BRISTOL AREA - DR. ETHEL M. REDMAN.

I have pleasure in reporting that visits and treatment at the South Gloucestershire Out-Stations of Soundwell, Thornbury and Chipping Sodbury have proceeded quietly and steadily during the past year.

71 girls have attended and 50 boys. The girls preponderate in troubles such as spinal scoliosis and flat feet; other complaints are shared about equally. As has been remarked before, the number of spinal scoliosis found amongst adolescent girls is disturbing and distressing. Although most respond to treatment, one feels it would be more correct if they did not occur.

Nine children have received prolonged treatment at Winford. Five have gone to the Bristol Royal Infirmary and one was treated at the Children's Hospital, Bristol.

Four of the nine who came to Winford were cured of their disabilities. Four showed marked improvement in their general health and fair improvement in their local deformities. But one, a Little's disease, although she improved generally and, I think, benefited from school and hospital life, showed but little improvement in her primary trouble.

I have pleasure in saying that we owe much of our success at the out-stations to Miss Shepherd's understanding of, skill and patience with, the children.

E. M. REDMAN.

## CHELTENHAM AREA - MR. J. S. ROBINSON.

The orthopædic work has progressed on the same lines as in previous years, and I have paid regular visits to the Hospitals and Out-Stations at Chipping Campden, Cirencester, Fairford, Stroud and Tewkesbury. One special session was held at Bourton-on-the-Water, to review cases from the North Cotswold District, where a number of cases of Infantile Paralysis occurred in the early Summer.

The number of cases dealt with was 371, 168 boys and 203 girls, making an increase of 45, as compared with last year. 35 more girls than boys were treated, approximately the same proportion as last year.

The only untoward feature was the outbreak of Infantile Paralysis in the North Cotswold Rural District, where 28 cases were notified. The majority of these cases were treated in the Delancey Hospital and Cheltenham General Hospital, and it is pleasing to record that good progress has been made in most of them, with little residual paralytic trouble. An ultimate recovery in those who are still undergoing hospital or out-patient treatment is anticipated. The advantage in early treatment of an orthopædic nature being instituted has been exemplified, so that plaster splints, etc. were applied early, and later the necessary remedial treatment arranged. This has ensured that preventable deformities have not occurred and therefore a quicker return to normal use of the limb will take place. Early postural treatment has been of great value in some of these cases who had the spinal muscles affected.

Remedial treatment in minor affections, such as flat feet, knock knees, and postural deviation of the spine has proved of much benefit, and a considerable number of cases attend the treatment centres, or are seen by the Orthopædic Nurses at their own homes for this purpose.

## NUMBERS TREATED.

					Boys	Girls
Total under the age of 2 years	...	...			17	12
"	"	"	5 years	...	64	43
"	"	"	10 years	...	129	108

Each year, more of the so-called minor defects are brought to our notice, a satisfactory feature, due in no small measure to the efficiency and zeal of the school medical officers.

Twenty-eight patients were treated at the Cheltenham General Hospital as in-patients during the year, the number of admissions being 51, making a total of 1,503 bed days. Operations were done to stabilize paralytic feet, a procedure which in certain cases enables splints to be dispensed with for walking, a consideration of definite importance to the patient in later life. The other operative procedures were those for congenital dislocation of the hip, wrenching, etc., for congenital club feet, which have to be repeated at short intervals, to obtain the necessary correction.

Much valuable work has been done in Hospital by the massage staff, including plaster bed correction of spinal deformities. A certain number of cases of hare lip and cleft palate have been operated on also during the year.

## ANALYSIS OF MAIN CASES.

					Boys	Girls
Deformities of feet	...	...	Flat feet		48	69
			Club feet		14	13
			Claw feet		1	7
Rickety Deformities	...	...	Knock knees		21	17
			Bow legs		25	12
Infantile Paralysis	...	...			21	16
Scoliosis	...	...			6	18
Torticollis	...	...			7	
Congenital Dislocation of the hip					12	

My thanks are due, again, to the Orthopædic Nurses, who have rendered such valuable service, and I am convinced that the extra Orthopædic Nurse has made for more efficient treatment and after care.

The Matrons and Staff of the various Hospitals and Out-stations visited, as well as the District Nurses have given cordial help at all times, while the members of the Voluntary Aid Detachments have given ungrudgingly of their time.

My thanks, in conclusion, are due to the Nursing Staff, and Orthopædic Staff of the Cheltenham General and Eye Hospitals, for their unremitting care of the cases in Hospital.

JAS. S. ROBINSON.

## GLOUCESTER AREA - MR. J. F. H. STALLMAN.

The work during 1935 followed the same general lines as in previous years. Two quarterly visits continued to be paid to Lydney Out-Station on account of the large numbers attending there. The numbers attending Newent Out-Station have increased slightly. It is unfortunate that the accommodation at Lydney is so poor when compared with the other Out-Station, but I understand that building operations are to be carried out shortly. The total number of children attending the Out-Station was 188 boys and 246 girls, showing an increase of 8 boys and 33 girls over last year.

### SUMMARY OF CASES.

				Boys	Girls
<i>Paralytic—</i>					
Infantile Paralysis	...	...	...	12	18
Erb's Paralysis	...	...	...	1	2
Spastic Paralysis	...	...	...	11	8
Facial Paralysis	...	...	...	1	1
<i>Rickets</i>	...	...	...	1	1
<i>Spine—</i>					
Scoliosis	...	...	...	4	26
Kyphosis (Postural)	...	...	...	—	7
Others	...	...	...	1	5
<i>Hip joints—</i>					
Congenital dislocation	...	...	...	—	2
Perthe's disease	...	...	...	1	2
Coxa Vara	...	...	...	—	1
Others	...	...	...	1	2
<i>Knees and legs—</i>					
Bow legs	...	...	...	13	12
Knock knees	...	...	...	17	21
Others	...	...	...	12	10
<i>Feet—</i>					
Flat feet	...	...	...	59	78
Club foot	...	...	...	5	2
Pes Cavus	...	...	...	7	5
Hammer toes	...	...	...	2	8
Kohler's disease	...	...	...	1	—
Others	...	...	...	10	19
<i>Have Lip and Cleft Palate</i>	...	...	...	—	1
<i>Osteomyelitis</i>	...	...	...	4	1
<i>Multiple congenital deformities</i>	...	...	...	—	1
<i>Torticollis</i>	...	...	...	5	3
<i>Various</i>	...	...	...	20	10
				188	246

The summary of cases I do not think requires any comment other than I have made in previous years. I have put a table down showing the number of boys and girls with orthopædic defects between the ages of 12 and 15.

				Boys	Girls
Up to 12 years	...	...	...	15	16
Up to 13 years	...	...	...	9	28
Up to 14 years	...	...	...	16	31
Up to 15 years	...	...	...	6	15
				<hr/> 46	<hr/> 90

The preponderance of girls over boys is marked between these ages. On studying the table of conditions it is interesting to note in connection with the above that there are 4 cases of scoliosis in boys to 26 in girls, and other postural defects of the spine also show a small preponderance of girls over boys. Between the ages of 12 and 15 is the time of rapid growth and development, and it is noted that girls seem to suffer from orthopædic defects as well as other conditions noted by Physicians during this period. This may be of interest to Educational Authorities. It is particularly unwise to push girls during this period.

In-patients show a small increase of admissions, the increase being two over last year. Some children have been admitted more than once, one child was admitted as many as three times. This has been for the purpose of renewing plaster splints.

#### IN-PATIENTS, 1935.

Gloucestershire Royal Infirmary	...	...	...	11
Children's Hospital	...	...	...	24

There has been a small outbreak of Anterior Polio-Myelitis during 1935. The cases have been treated as in-patients. The treatment carried out has been absolute rest in a plaster bed without any physical treatment until the muscles have shown definite increasing recovery, and then physical treatment has only gradually been given. They have been kept in Hospital over prolonged periods of several months, and with this form of treatment, that is absolute rest, the paralysed muscles have shown a very gratifying degree of recovery compared with the old form of treatment, that is early unrestricted massage and electrical treatment, and early walking.

The appointment of a third Orthopædic Nurse has been of great advantage in allowing a more thorough follow-up of cases and continuous treatment, than was possible before. Some complaint is made about the difficulty of treating children during the winter who have cold limbs, particularly in cases of Infantile Paralysis. It is very difficult to treat a child in this cold condition, and a portable Radiant Heat bath would be of considerable value in assisting treatment.

I have to thank Miss Bowden and Miss Shepherd for their skilful and devoted help. I also wish to thank those ladies of the V.A.D. who help at the Out-Stations, and all those who give so much of their time in helping to bring this work to a successful issue.

J. F. H. STALLMAN.

## INFECTIOUS DISEASES.

### GENERAL.

There is considerable variation, from year to year, in the common infectious diseases, and it is only by examination of the records over a long period of years that the trend of their incidence can be observed.

A statement of the records for the past forty years has been prepared for this County in respect of typhoid fever, scarlet fever and diphtheria—for the districts separately and for the County as a whole. Taking the attack rate in 1896–1900 for the County as a whole, the following statement shows the incidence in the four subsequent decennia and the quinquennium 1931–5.

		1896–1900	1901–10	1911–20	1921–30	1931–5
Typhoid Fever	...	100	55	34	29	13
Scarlet Fever	...	100	78	69	58	48
Diphtheria ...	...	100	125	107	80	67

An obvious fact brought out in this statement is the great drop in the occurrence of typhoid fever which is now conspicuous by its almost complete absence. This is probably the most striking evidence of improvement in sanitary conditions whereby the transmission of infection has been limited : the most common cause was the contamination of water supplies and with improvement of supplies that source has been reduced almost to a minimum. The opportunities for widespread infection, however, exist still and necessitate even a closer watch on possible contamination of water supplies with even more widespread opportunities of disaster owing to the large populations supplied from the same source. Similar disasters may occur in the tendency of bulking supplies of milk and the widespread distribution of infection if a supply does become contaminated.

The fall in the incidence of scarlet fever cannot be explained so simply, for direct action has not the same possibilities as with the infection of typhoid fever. Probably one influence is the steady improvement in home conditions whereby there is a lowered tendency to overcrowding of children in rooms, but there are also other factors, not clear at present, such as periodic variation in the character of infective material over many generations. Another point on which knowledge is being gained gradually is the nature of the infection which is known now to be almost protean in character.

The incidence of diphtheria is irregular and at present information is wanting to explain the increase of 25 per cent. in 1901–10 and the steady fall from that time to a decrease of 33 per cent in

1931-5. Some of the operating factors may be the same as those with respect to scarlet fever, but as regards diphtheria persons have a wider measure of control individually. This consists in the protection which can be acquired by immunization somewhat on the lines of vaccination for smallpox and for typhoid or enteric fever.

Similar figures to those for the County as a whole are available for the individual districts, but in these smaller areas the variations are very violent dependent on local circumstances.

#### SCARLET FEVER.

Mention was made last year of the waves of incidence of Scarlet Fever spreading over brief periods of years, with a tendency to longer intervals between the crests. The height of these crests is becoming reduced and this is evidenced by a consideration of the incidence over a long period of years given in the preceding section of this report. Coincident with this decreased incidence there has been a considerably reduced case fatality and the general experience is that ordinarily the type of the disease is becoming milder. This is shown statistically in the following statement :

No. per year (Average).	1935	1934	1933	1932	1929- 1931	1926- 1928	1923- 1925	1920- 1922	1917- 1919	1914- 1916	1911- 1913	1908- 1910	1905- 1907	1902- 1904
Cases ...	601	734	654	430	602	687	672	528	293	1152	999	648	689	1216
Deaths ...	8	5	2	1	1.7	5	5	5	1	14	11	7	9	22
Hospital Cases	355	251	434	287	357	362	355	218	151	582	498	286	221	371
Case Fatality%	1.3	.7	.31	.23	.28	.77	.74	.88	.46	1.24	1.07	1.08	1.26	1.84

Cases of scarlet fever occurred in all districts, the largest numbers being reported from Sodbury R.D. (63), Kingswood U.D. (61), Cirencester R.D. (54), Lydney R.D. (51) and Thornbury R.D. (48). In general, the type of the disease was regarded as mild, but the average fatality (1.3 per cent.) was considerably higher than for very many years : the reason is that in the local outbreaks in Cheltenham M.B. (36), Cirencester R.D. (54), Tetbury R.D. (38) and West Dean R.D. (62), 8 deaths occurred among 190 cases, a case fatality of 4.2 per cent. The infection was described as being particularly severe in the Tetbury group of cases.

#### DIPHTHERIA.

The number of cases notified was 289, 33 less than in 1934. As has already been mentioned the incidence of this disease is more variable than with respect to scarlet fever, though on the whole it has been less common in the last fifteen years. A satisfactory

feature is that the fatality from this disease is now considerably lower than it was up to recent years. The general tendency is seen in the following statement :

No. per year (Average).	1935	1934	1933	1932	1929- 1931	1926- 1928	1923- 1925	1920- 1922	1917- 1919	1914- 1916	1911- 1913	1908- 1910	1905- 1907	1902- 1904
Cases ...	289	322	156	214	373	251	247	384	273	476	406	479	595	374
Deaths...	7	13	3	16	26	20	19	31	29	64	27	44	51	38
Hospital Cases	229	266	141	187	290	184	153	212	174	221	126	177	146	51
Case Fatality %	2.4	4.0	1.9	7.5	7.0	7.8	7.8	8.0	10.6	13.5	6.6	9.25	8.5	10.1

The areas in which most cases occurred were Thornbury R.D. (41), Dursley R.D. (40), Cheltenham M.B. (35), and it is interesting that among these 146 cases there was only one death.

Following the Conference of Medical Officers of Health at Gloucester on 16th January, 1935, arrangements for immunization were made in various areas including Cheltenham M.B., Tewkesbury B. and the following Rural Districts : East Dean, Gloucester, Lydney, North Cotswold, Sodbury, Thornbury and West Dean. The response does not seem to have been very enthusiastic in most areas : for example, in Tewkesbury no families took advantage of the opportunity. In other areas the numbers were : Cheltenham, 397, East Dean 74, Lydney 110 and North Cotswold 295. Much larger results were obtained in Sodbury 903 children, Thornbury 1,105 and West Dean 1,330.

ENTERIC FEVERS.

It has been mentioned earlier that the cases of the diseases included under this heading are now becoming comparatively rare, but local outbreaks due to specific infection of water and milk do occur from time to time. The number of cases notified in 1935 was 16, the largest since 1932 (34) : nearly half (7) occurred in Gloucester R.D., in which area cases are reported nearly every year from the Mental Hospital, the inmates of mental institutions seeming to be particularly liable to intestinal complaints.

The following is a summary of the records from 1902 :

No. per year (Average.)	1935	1934	1933	1932	1929- 1931	1926- 1928	1923- 1925	1920- 1922	1917- 1919	1914- 1916	1911- 1913	1908- 1910	1905- 1907	1902- 1904
Cases ...	16	5	10	34	21	32	51	28	41	41	51	49	65	77
Deaths ...	4	1	2	6	7	6	6	3	7	9	6	9	9	10
Hospital Cases	6	2	6	23	13	16	17	14	12	14	18	19	23	18
Case Fatality %	25.0	20.0	20.0	17.7	3.2	17.7	11.7	10.9	17.9	23.0	11.8	19.2	13.8	13.0

## OPHTHALMIA NEONATORUM.

16 cases of discharge from a baby's eyes were notified as being of the nature of ophthalmia neonatorum ; the number of instances of discharge from the eyes, " however slight," reported by certified midwives, was 61.

## INFANTILE PARALYSIS (ANTERIOR POLIOMYELITIS).

A very unusual feature of the year was the occurrence of two groups of cases of this disease in the autumn, one in the North Cotswold R.D. and a smaller one in the Forest of Dean. The following note which was presented to the Medical Services Committee gives a brief account of the outbreak :

This disease was added to the list of those compulsorily notifiable on the 1st September, 1912, but up to the present year the cases reported in this County have been few. The actual numbers year by year have varied from none in 1922 and 1933 to 9 in 1929, 10 in 1915 and 1917 and 11 in 1916. The cases have been widely scattered except for the greater number in 1916 and 1917 : those in 1929 occurred in 5 districts, 1915 in 5 districts, 1917 in 4 districts (6 cases in Cheltenham M.B.) and 1916 in 2 districts (10 in Cheltenham M.B.). The 16 cases occurred in Cheltenham when troops were billeted there in considerable numbers and this was the only known considerable group of cases in the County during the past twenty-three years until July of this year.

The notes of the Medical Officer of Health (Dr. Garrett) on this group are :

- 1916 " Of this disease there was a small outbreak in August with following cases in September and October, numbering 10 in all. There was one death. Most of the others were mild cases and recovered with slight persistence of paralysis. The cases for the greater part affected one quarter of the town though being in different streets. The same quarter has had cases previously."
- 1917 " Of this disease we had six notifications, three of them being College boys resident in two different houses and one of them died. The other three cases were casual cases not connected with each other and neither died. The ages of the cases varied between 2 and 17 years ; 4 were boys, 2 girls. The cases all occurred between 7th September and 25th October and as on former occasions the disease has here showed the same marked predilection for the late summer and autumn season. In 1916 we had 10 cases between 10th August and 29th October, the oncoming cold weather appearing to put an end to the disease. The spread is so insidious and its means so uncertain as to render it particularly difficult to apply effective preventive measures. The fact of the cases occurring rather at a considerable distance apart than close together seems to indicate an insusceptibility on the part of most people, as if the disease is infectious as one commonly understands the term, it is rational to suppose that proximity would lead to the liability of spread but for such saving insusceptibility."

Up to 11th July in the present year only one case had been reported, on 26th January in the Cheltenham M.B. On that day a boy of 2 years was notified from Lower Swell in the North Cotswold Rural District. About the same time the numbers of cases notified in England and Wales rose suddenly from 7 or 8 a week, to 18 in the week ending 27th July, and 30, 37, 34 and 35 in the succeeding four weeks.

After the Lower Swell case there was an interval of nine days, when another case occurred followed by a group of six cases a week later ; during the subsequent five weeks 18 more cases were notified. There was then an interval of five weeks before the last two cases of this group occurred, a week after one another. In the latter part of this period sporadic cases appeared in quite different parts of the County—2 in East Dean, 5 in West Dean, 1 in Lydney and 1 in Mangotsfield. The total cases were 37.

The 28 cases were distributed over seven parishes, namely :

Longborough	...	...	...	12
Lower Swell	...	...	...	4
Stow-on-the-Wold	...	...	...	6
Bourton-on-the-Water	...	...	...	3
Condicote	...	...	...	1
Donnington	...	...	...	1
Moreton-in-the-Marsh	...	...	...	1

On the occurrence of the first cases in the North Cotswold Rural District, Dr. J. E. Jameson, the Medical Officer of Health, advised local practitioners of their existence and arranged for their treatment in the Delancey Hospital at Cheltenham. Other measures which he took included the provision of tents to relieve overcrowding in three infected houses, clearing of refuse, consultation over suspects, stopping children from infected parts being conveyed to Schools in neighbouring places and the engagement of a nurse to attend a few cases left in their houses.

On the 12th August a general account of the events up to that time was sent to the Ministry of Health and Dr. W. Vernon Shaw, Medical Inspector, visited the affected villages with Dr. Jameson and Dr. Morris Jones on the 14th August and subsequent dates. He saw the patients both at Delancey Hospital and those in their own homes. In two instances the diagnosis which was already in doubt was revised. At a visit to Gloucester on the 26th August we discussed fully all the circumstances and the only additional measure suggested was a survey of all the children who were absent from School for periods during June and July with a view to the detection

and treatment of any mild unrecognised cases amongst them which may have signs of paralysis of muscles. This survey was arranged for Tuesday, the 3rd September.

Dr. T. F. H. Blake then visited the six Schools which were mainly affected and saw all the children who had been absent for periods in June or July—66 in number. The causes of absence proved to be the minor ailments from which children suffer, and Dr. Blake concluded, "I saw no signs of any of these children having suffered from anterior polio-myelitis."

The group of 28 North Cotswold cases consisted of 22 boys and 6 girls ; their ages ranged from 8 months to 20 years, all but three (aged 15, 17 and 20 years) being thirteen years or younger. Sixteen cases were removed to the Delancey Hospital, Cheltenham, and twelve were treated at home ; one boy whose breathing was difficult at an early stage was taken to the Wingfield-Morris Orthopædic Hospital to be treated in the Drinker Respiratory Chamber and a girl who developed similar trouble in the Delancey Hospital was transferred to the Wingfield Hospital for this treatment. The boy did well for a time but died suddenly owing to oedema of the lungs ; the girl is still in the Hospital and is doing fairly well.

The summary of the present position is as follows :

Re-diagnosed	...	...	...	2
Quite well	...	...	...	9
General debility but no paresis				3
Some paresis	...	...	...	9
Considerable paresis	...	...		3
Died	...	...	...	2
				<hr/>
				28
				<hr/>

Most of the children requiring treatment are receiving it under the County Orthopædic Scheme and arrangements were made privately for the admission of three children (R.S., E.W. and C.S.), to the Lord Mayor Treloar Homes at Alton.

The eight cases in the Forest of Dean (including a girl not notified) appear to have been of a more serious type ; three children (including a boy who returned to London) died, three have considerable paralysis and two less severe trouble.

In the course of a visit to the Wingfield-Morris Hospital on 27th August we saw a girl (M.T.), a former pupil of the Chipping Campden Grammar School, who was notified as suffering from Anterior Polio-Myelitis on 8th December, 1932, and was transferred to Oxford from the Delancey Hospital; her home is at Icomb, in the same district as the North Cotswold group of cases of this year. She looked well but still has considerable paralysis of her lower limbs as well as some weakness of the arms.

The experience above recorded is unique in the history of the County, so far as records are available, and there has been considerable speculation as to the factors which account for it. An early suggestion was that it was due to the prolonged, very dry weather and the scattering of dust, especially from domestic refuse, of which there were many collections in the parishes in the North Cotswold district. But these conditions prevailed not only in the seven parishes in which cases occurred in the North Cotswold district with a population of about 16,000 and in the Forest of Dean (with about 34,000 persons) where eight cases were reported, but also in most parts of the County with a population of nearly 340,000.

Other suggestions are :

(1) The disease is very little infective and it is when for some reason or other an individual is very susceptible that he contracts the infection and develops illness.

(2) The infection is very general. But, very few persons show any signs and only a very small proportion have observable illness: rarely is the illness severe.

The latter is, I am informed, the opinion in Canada, where Anterior Polio-Myelitis is comparatively common. Even assuming this view represented the true facts, the sporadic incidence of illness and the few cases that occur are still unexplained, and it would appear that it must be accepted that our knowledge of the matter is extremely limited.

## TUBERCULOSIS.

The number of new cases reported was 387, 256 of pulmonary and 131 tuberculosis of other parts. The distribution of the cases according to age and sex, was :

## NEW CASES AND MORTALITY DURING 1935.

<i>Age Period.</i>	NEW CASES.				DEATHS.			
	<i>Pulmonary</i>	<i>Non-Pulmonary</i>	<i>Pulmonary</i>	<i>Non-Pulmonary</i>	<i>Pulmonary</i>	<i>Non-Pulmonary</i>	<i>Pulmonary</i>	<i>Non-Pulmonary</i>
	<i>M.</i>	<i>F.</i>	<i>M.</i>	<i>F.</i>	<i>M.</i>	<i>F.</i>	<i>M.</i>	<i>F.</i>
0 ...	—	—	—	—	—	—	2	1
1 ...	—	1	10	8	—	—	3	1
5 ...	6	5	27	18	}	—	{	3
10 ...	9	5	11	16				
15 ...	12	15	3	2				
20 ...	15	20	11	3	}	5	24	{
25 ...	49	35	5	8				
35 ...	22	19	3	—	14	14	5	2
45 ...	18	7	1	2	18	6	1	—
55 ...	11	5	2	1	18	3	3	2
65 and upwards	—	2	—	—	3	2	1	5
TOTAL ...	142	114	73	58	81	77	24	19

The fall in notification of new cases to which attention has been drawn in recent years, has been accompanied by a considerable fall in the death-rate due to this cause, particularly from pulmonary tuberculosis. Thus the pulmonary rate in 1901-10 was .86 per 1,000 of the population, and has fallen fairly steadily to .53 in 1934 and .47 in 1935. The present scheme of supervision and treatment of cases commenced in 1912 and it is tempting to regard the reduction as due to our direct efforts: it must be remembered, however, that the fall in the tuberculosis death-rate began long before this direct campaign commenced and the result must be taken as due in very great measure to other influences, more particularly improved circumstances in the conditions of life generally.

A running table has been kept since notification commenced of the numbers of cases under observation, and deaths each year, and is given up to date in the following statement:

PULMONARY							NON-PULMONARY.			
<i>Known cases in county during year</i>			<i>Deaths</i>	<i>% Death rate.</i>	<i>Survivors</i>	<i>Known cases in county during year.</i>			<i>% Death rate.</i>	<i>Survivors</i>
1913	...	...	493	41	8.3	452	121	13	10.7	108
1914	...	...	977	209	21.4	768	223	25	11.2	198
1915	...	...	1,242	214	17.2	1,028	307	36	11.7	271
1916	...	...	1,459	345	23.6	1,114	368	50	13.6	318
1917	...	...	1,490	242	16.2	1,248	381	35	9.2	346
1918	...	...	1,685	260	15.4	1,425	408	27	6.6	381
1919	...	...	1,686	234	13.9	1,452	428	39	9.1	389
1920	...	...	1,736	211	12.2	1,525	423	25	5.9	398
1921	...	...	1,784	190	10.6	1,594	442	25	5.65	417
1922	...	...	1,923	248	12.9	1,675	463	29	6.3	434
1923	...	...	1,954	191	9.8	1,763	573	51	8.9	522
1924	...	...	1,978	237	12.0	1,741	584	33	5.65	551
1925	...	...	1,995	240	12.0	1,755	595	28	4.7	567
1926	...	...	2,009	138	6.8	1,871	713	45	6.4	668
1927	...	...	2,097	194	9.3	1,903	782	34	4.35	748
1928	...	...	2,158	216	10.0	1,942	847	37	4.4	810
1929	...	...	2,213	194	8.8	2,019	978	28	2.9	950
1930	...	...	2,277	184	8.1	2,093	1,045	24	2.3	1,021
1931	...	...	2,353	200	8.5	2,153	1,150	25	2.2	1,125
1932	...	...	2,278	224	9.85	2,054	1,193	28	2.3	1,165
1933	...	...	2,350	169	7.2	2,181	1,305	21	1.6	1,284
1934	...	...	2,428	165	6.8	2,263	1,397	27	1.9	1,370
1935	...	...	2,457	129	5.3	2,328	1,463	28	1.9	1,435

From this statement, taken in conjunction with the fall in the number of new cases reported and in the death-rate among the whole population, it would appear that, on the whole, the average duration of the disease tends to become longer and the natural resistance to it to become increased. When this resistance has reached a stage with absence of symptoms of tuberculosis after a prolonged period of years other than those compatible with a completely healed lesion, the names are removable from the register, in accordance with the Regulations of the Minister of Health. The number of names so removed in 1935 was considerably higher than in 1934, being 59 pulmonary and 53 non-pulmonary cases; the totals for ten years were 781 pulmonary and 354 non-pulmonary. These are included among the survivors in the above table.

#### *Dispensaries.*

The Tuberculosis Officers attend weekly at six dispensaries and periodically visit fifteen out-stations. They also see patients unable to attend at one of these places in their homes and hold frequent consultations with the usual medical attendants. In 1935 the Tuberculosis Officers held 668 consultations, saw 485 patients at out-stations, 1,144 cases at Hospitals, and paid 198 home visits.

The total new cases reported and the attendances at dispensaries were :

New cases reported :					
Pulmonary	...	...	...	...	326
Other Forms	...	...	...	...	174
Total	...	...	...	...	500
New cases examined (including contacts)					1,163
Attendances	...	...	...	...	5,871

### *Shelters.*

The number of shelters in use during 1935 was 115. The number of patients to whom they were newly loaned during the year was 36, and the total persons who had the use of a shelter during 1935 was 125.

### *Residential Institutions.*

All the beds at Standish House were in use during 1935, the average number of occupied beds being 230. The admissions year by year were :

<i>Beds available.</i>				<i>Admissions.</i>						
				1929	1930	1931	1932	1933	1934	1935
1. <i>Early cases</i> in both sexes and advanced cases among males										
		M.74								
	Standish House	....	F.26 —100	135	148	161	171	128	134	150
	<i>Surgical cases</i>	... ..	38	43	28	43	35	47	47	29
2. <i>Advanced cases</i> in City and Stroud Isolation Hospitals			45*	58	39	68	84	72	90	88
3. <i>Surgical cases.</i> Cheltenham General Hospital	....	....	10	17	21	27	23	29	32	26
4. <i>Children.</i> Standish House	... ..	... ..	112	93	80	105	127	115	123	111
	Totals	... ..	305	346	316	404	445	391	426	404

\* 36 up to 31st March, 1932.

### *Compulsory Powers*

No case was compulsorily removed to a Sanatorium or Hospital under Section 62 of the Public Health Act, 1925, during the year, and, so far as information has been given, no action was taken under the Public Health (Prevention of Tuberculosis) Regulations, 1925, with respect to employees in the milk trade.

### *Home Visits by Nurses.*

The work of the Tuberculosis Officers is supplemented by visits to the homes of patients by nurses with a view to their directions being carried out and to improvements in the conditions under which the patients are living. The nurses undertaking this work in 1935 were the 7 County Health Superintendents, 4 whole-time Health Visitors, and 136 District Nurses.

The numbers of these visits have increased from 4,578 in 1917 to 10,807 in 1935.

## VENEREAL DISEASES.

The decrease in the number of new cases coming under treatment noted during the last few years, continued into 1935, being a record low figure of 189, the smallest number in any year. The following is a statistical statement of the numbers from the time the scheme came into operation :

	NEW CASES.					ALL CASES.				
	<i>Syphilis.</i>	<i>Soft, Chancre.</i>	<i>Gonor- rhoea.</i>	<i>Not Venereal.</i>	<i>Total</i>	<i>Males</i>	<i>Females</i>	<i>Attend- ances.</i>	<i>In-patient days.</i>	<i>Specimens examined</i>
1917 ...	31	2	15	13	61*	25*	36*	258*	524*	75*
1918 ...	77	7	77	58	219	135*	76*	1,090	662	214*
1919 ...	125	16	143	68	352	264*	74*	2,729	1,549	249*
1920 ...	192	7	159	64	422	280*	134*	3,982	1,035	527*
1921 ...	103	6	87	91	287	175*	65*	3,292	1,083	484*
1922 ...	94	3	77	51	225	110†	50†	2,727	810	422*
1923 ...	80	2	72	76	230	89†	75†	3,322	654	632*
1924 ...	82	5	100	80	267	148†	92†	3,655	716	697*
1925 ...	87	—	94	101	282	138*	121*	3,729	876	986*
1926 ...	57	—	102	73	232	131*	80*	3,564	718	1,016*
1927 ...	98	—	94	123	315	160*	118*	4,363	1,073	1,030*
1928 ...	86	3	120	148	357	170	140*	5,511	639	670*
1929 ...	64	—	122	181	367	218	149	5,841	839	1,115
1930 ...	73	—	168	174	415	257	158	6,424	1,252	1,080*
1931 ...	83	—	153	176	412	230	182	8,742	1,596	1,565
1932 ...	56	2	119	141	318	176	142	7,335	1,082	1,096
1933 ...	56	1	132	100	289	169	120	7,471	1,395	1,145
1934 ...	67	1	129	90	287	148	139	7,930	1,143	1,147
1935 ...	48	—	96	45	189	127	62	6,382	361	860

\* Excluding Bristol Hospitals.

† Excluding Bristol and Gloucester Hospitals.

In nearly one-quarter of new cases the condition was regarded as non-venereal in character. This and similar experience in previous years give some evidence that possibly infected persons take advantage of the opportunities for treatment, and further evidence is given by the fact that the average number of attendances for treatment (excluding non-venereal) was about 33 per new case.

## BACTERIOLOGICAL AND PATHOLOGICAL WORK

The range of the work at present undertaken includes examination of specimens of the organisms of acute infections and tuberculosis, of milks for the tubercle bacillus and total bacterial content, of smears, etc., for the spirochaete of syphilis and the organism of gonorrhoea, of specimens and of blood for serum reactions, and, in certain cases, animal inoculations. This assistance in the diagnosis of certain diseases is appreciated greatly, and the opportunity of having the examinations made at the laboratories of the Cheltenham and Gloucester Hospitals as well as at the Bristol University Laboratory, is helpful in various ways. The association of the hospital laboratories in the examination of milks, arranged in December, 1933, made the work uniform over the whole County.

The following statement is a summary of the work undertaken :

## YEARLY AVERAGES.

	1905-14	1915-24	1925-29	1930-34	1935
<b>GENERAL.</b>					
Tuberculosis ...	207	810	2,366	2,695	2,439
Diphtheria ...	1,553	1,152	3,261	4,384	4,418
Enteric fever—					
Bloods ...	49	47	43	177	64
Faeces and urine	—	—	5	3	6
Cerebro Spinal Fever	—	4	2	3	12
Puerperal Pyrexia	—	—	5	25	8
Other ...	—	1	—	1	10
<b>Total</b> ...	<b>1,809</b>	<b>2,014</b>	<b>5,682</b>	<b>7,288</b>	<b>6,957</b>
<b>VENEREAL DISEASES—</b>					
Wasserman...	—	335	637	532	349
Smears ...	—	98	374	658	451
Other ...	—	6	12	16	60
<b>Total</b> ...	<b>—</b>	<b>439</b>	<b>1,023</b>	<b>1,206</b>	<b>860</b>
<b>GRAND TOTAL</b> ...	<b>1,809</b>	<b>2,453</b>	<b>6,705</b>	<b>8,494</b>	<b>7,817</b>

**ISOLATION HOSPITALS**

There was no change of any importance in the accommodation available for cases of infectious disease. The arrangements are more comprehensive and complete in some parts of the County than in others, but there is provision for cases from any part of the County for which isolation is regarded as necessary.

Progress in giving effect to the Scheme of the County Council under Section 63 of the Local Government Act, 1929, was delayed in connection with the Review of County Districts: when the Review Order was issued on 21st February, 1935, minor alterations were necessitated in the hospital areas. The revised scheme was considered at a Conference of District Councils on 12th December, 1935, and it was then agreed that the County Council should be the Hospital Authority for the whole area, both for smallpox and other infectious diseases. It was agreed further, that the accommodation would be provided by the present Hospital Authorities and that the County Council should enter into agreements with them for the reception of patients.

**HOUSING**

The activity in house building continued during 1935, the actual number built being 2,398 (less Newent R.D. for which information is not available), 81 more than in 1934 (2,317) the previous record. The number erected by Local Authorities was

630, the highest in any year since 1931 when 642 were built, the same number as in 1927. The following is a summary of the returns since 1919 :

					Under Schemes	Privately	Total.
1919	...	...	...	...	—	53	53
1920	...	...	...	...	98	77	175
1921	...	...	...	...	865	171	1,036
1922	...	...	...	...	731	228	959
1923	...	...	...	...	12	363	375
1924	...	...	...	...	92	506	598
1925	...	...	...	...	165	736	901
1926	...	...	...	...	309	794	1,103
1927	...	...	...	...	642	824	1,466
1928	...	...	...	...	329	797	1,126
1929	...	...	...	...	480	797	1,277
1930	...	...	...	...	384	584	968
1931	...	...	...	...	642	707	1,349
1932	...	...	...	...	312	757	1,069*
1933	...	...	...	...	364	1,262	1,626
1934	...	...	...	...	300	2,017	2,317
1935	...	...	...	...	630	1,768	2,398*
Totals					6,355	12,441	18,796

\*Excluding Newent R.D. for which no return received.

An interesting point in this table is the sustained enterprise in the erection of houses privately, evidencing the continued demand which encourages such building. In the aggregate since 1919 the number of these houses is approximately twice that of Council houses : in the early years this activity was encouraged by subsidies.

Building developments will doubtless be stimulated as a result of the survey for overcrowding under the Housing Act, 1935. The returns from this survey should give interesting information : in Thornbury R.D., of 5,032 houses (census 1931), 3,449 were surveyed and 48 were overcrowded, and in Sodbury R.D. of 6,684, 93 were overcrowded, 1.4 per cent. in each area.

The Housing (Rural Workers) Act, 1926, was again extended in 1935, this time to 24th June, 1938, but the opportunities have not been utilized so fully here as in some counties, though improved accommodation can be provided more economically under these powers than by the building of new houses. In 1935, nine applications in respect of 14 cottages were received by the County Council and grants were approved for 10. In 7 districts the Act is administered by the District Councils and complete information as to action by them is not available.

## WATER SUPPLY

On the whole, though there were dry summer months, the rainfall for the year was above the average for some ten years and the period of great anxiety generally as to sufficiency of water was ended. There are, however, many parts of the County in which the local circumstances should be improved : those specially mentioned include :

DURSLEY R.D. North Nibley and part of Nympsfield.

GLOUCESTER R.D. Parts of Upton St. Leonards and Hempsted and Parishes in former Wheatenhurst R.D.

NORTHLEACH R.D. Cold Aston and part of Eastington.

NORTH COTSWOLD R.D. Deficiency in seven parishes.

SODBURY R.D. Wapley with Codrington, Hawkesbury, Marshfield and Dodington.

STROUD R.D. Sheepscombe, Camp and Bisley.

TETBURY R.D. Leighterton.

As regards the parishes in the North Cotswold R.D., a comprehensive scheme has been prepared which will provide a good supply for a very wide area. The needs in several of the other places have been matters of report for many years, particularly those in the Gloucester R.D., and if the new authority can solve the difficulties great advantage will accrue to the villages in question.

The most striking development in the matter of improved supplies has been the yield from two bore-holes sunk by the Cirencester U.D.C. at Baunton, for the augmentation of the town supply; the yield is given as 12 million gallons per day and the Council are prepared to share it with their neighbours. Other works carried out in 1935 were :

CHELTENHAM R.D. The Cheltenham Corporation mains were extended to Leigh and Elmstone Hardwicke out of a loan of £2,775. The local supply at Teddington was purchased by the R.D.C. and extended at a cost of £775.

CIRENCESTER R.D. The water mains at Poulton were extended at a cost of £495 and the paraffin pumping plant at Coates was replaced by an automatic electric-motor.

DURSLEY R.D. Extensions were carried out at Dursley (£930), Stinchcombe (£1,313), Cam (£2,760) and Wotton-under-Edge (£783 for plant).

EAST DEAN R.D. Progress was made in the 200 feet new bore hole.

SODBURY R.D. Iron Acton was connected with the mains of the West Gloucestershire Water Company, and the ram supply for Hillesley was taken over by the R.D.C. ; at the latter place the ram was replaced by a petrol-engine which was not satisfactory and a new scheme was laid before the Ministry of Health.

THORNBURY R.D. Cromhall was supplied by the West Gloucestershire Water Company.

Applications for assistance from the County Council were received in the provision of the following supplies :

DURSLEY R.D. Uley. The total cost was estimated to be £6,560 and a grant of 20 per cent. of the net annual deficiency was promised.

EAST DEAN R.D. Wigpool and Littledean. The estimated cost was £2,384 and a grant of 25 per cent. of the net annual deficiency was agreed.

SODBURY R.D. Wapley with Codrington and Marshfield. A grant of 25 per cent. of the net annual deficiency was approved towards the cost of £7,353 for extending the mains.

TETBURY R.D. Boxwell with Leighterton. In respect of a scheme estimated to cost £3,000 the County Council agreed to make a grant of 25 per cent. of the net annual deficiency, but for the time being the scheme is in abeyance.

## SEWERAGE AND SEWAGE DISPOSAL

The list of places reported to be in need of sewerage remains much the same as in previous years, but some works were in course of execution and various improvements were effected in existing schemes. Amongst them were :

KINGSWOOD U.D. and WARMLEY R.D. A joint scheme of main sewerage and sewage disposal to replace the unsatisfactory works at Kingswood at a cost of £24,000 is under construction.

EAST DEAN R.D. Work on the sewerage of Littledean and Mitcheldean was commenced in November.

NORTH COTSWOLD R.D. Improvements in the disposal works at Moreton-in-the-Marsh were made at a cost of £3,650.

Other schemes in preliminary stages were :

CHELTENHAM R.D. Alderton and Gretton C.P.

EAST DEAN R.D. Drybrook.

SODBURY R.D. Filton, Marshfield and Winterbourne.

STROUD R.D. Minchinhampton Ecclesiastical Parish.

THORNBURY R.D. Almondsbury.

Parts noted particularly in 1935 as being in need of attention were :

CIRENCESTER U.D. Stratton, newly absorbed in U.D.

TEWKESBURY B. Improvement in disposal works.

DURSLEY R.D. Coaley, Kingswood, North Nibley, Nympsfield, Slimbridge and Uley.

GLOUCESTER R.D. Brockworth, Frampton-on-Severn, Hempsted, Quedgeley and Saul.

NORTH COTSWOLD R.D. Bledington, Mickleton and Willersey.

WEST DEAN R.D. All parishes, except Coleford already sewered in parts.

Grants towards the cost of schemes of sewerage were agreed by the County Council in respect of Littledean and Mitcheldean (East Dean R.D.) and Marshfield (Sodbury R.D.).

## SURVEY OF SEVERN

The District Inspector of the Ministry of Agriculture and Fisheries arranged for the annual survey of the oxygen content of the Severn in its whole length on 2nd July, 1935. The note on the Gloucestershire part of the river reads :

In connection with the general survey of the river on 2nd July, 1935, Dr. T. F. H. Blake took samples at seven points on the stretch in Gloucestershire on that day, between 9.45 a.m. and 2.30 p.m.

The weather was bright and warm, though in the later part of the time the sky was cloudy and the sun obscured. The air temperature ranged from 17.5 degrees to 20.5 degrees falling off to 19 degrees for the last three observations. On the whole the river

appears to have been less muddy than at some previous surveys and the sample taken at Minsterworth ferry, just after high tide, was unusually free from sediment.

Three samples were taken at each of the same seven points as in the previous three years ; one (A) was fixed immediately, one (B) after submerging in water for four days, and the third (C) was sent to the Government Laboratory, Clement's Inn Passage, for nitrogen determination. Samples "B" were fixed on 6th July and both "A" and "B" samples were titrated that day with the Government Laboratory standard thio-sulphate (.0488 N).

The percentage saturation was on the high side, ranging from 93 to 104, with the exception of the Minsterworth ferry sample in the estuary which is always of a low order : this year it was 61 per cent. those in the other three years being 72 (1934), 67 (1933) and 86 (1932).

The summary of the observations is :

	Time	pH.	Temperature		Ammoniacal Nitrogen parts per 100,000	Samples fixed 2nd July		Samples fixed 6th July	
			Air	Water		Oxygen parts per 100,000	% of Saturation	Oxygen Parts per 100,000	% of Saturation
1. Mythe Bridge ..	a.m. 9.45	7.4	17.5	21.5	.014	0.88	96	0.36	39
2. Lower Lode ..	10.30	7.6	18	21.5	.014	0.95	104	0.62	68
3. Haw Bridge ..	11.20	7.5	19	21.5	.019	0.94	103	0.37	40
4. Maisemore Bridge	p.m. 12.30	7.5	20.5	22	.011	0.99	109	0.37	40
5. Over Bridge ..	1.15	7.3	19	21.5	.020	0.86	93	0.04	4
6. Minsterworth Ferry	1.55	7.3	19	21.5	.028	0.56	61	0.19	21
7. Westgate Bridge ..	2.30	7.5	19.5	22	.017	0.92	100	0.41	45

The percentage loss on keeping ranged from 55 (Westgate Bridge) to 95 per cent. (Over Bridge on the West arm of the Severn) after four days submersion compared with a range from 40 to 74 per cent. in 1934 (eight days submersion) and 32 to 61 per cent. in 1933 (eight days submersion). The comparative figures for saturation and loss for each year are set out in the following table :

	% Saturation				% Loss on Keeping			
	1932	1933	1934	1935	1932	1933	1934	1935
Mythe Bridge .. ..	83.5	65	114	96	—	45	74	59
Lower Lode .. ..	93	74	92	104	—	35	60	65
Haw Bridge .. ..	98	64	97	103	—	32	57	61
Maisemore Bridge ..	93	82	92	109	—	56	67	63
Over Bridge .. ..	94	86	68	93	—	37	40	95
Minsterworth Ferry ..	86	67	72	61	—	44	64	66
Westgate Bridge .. ..	93	65	84	100	—	61	62	55

The loss was lowest in the year of low oxygen saturation (1933) and highest in 1935 when the saturation was also high. An unusual feature was the absorption of practically all its oxygen in the sample taken at Over Bridge, which is a striking contrast to the results in the two previous years.

On the whole the Gloucestershire Severn appears to have been in good condition so far as the oxygen content is concerned, and, except for the Over Bridge sample, the amount of readily oxidisable matter was about the same as in 1934, though somewhat above that in 1933.

## DISPOSAL OF HOUSE REFUSE

Collection of domestic refuse is arranged in all the Urban Districts and the area in which such collection is undertaken in Rural Districts is being enlarged slowly. Also there is a tendency for Rural District Councils to give up the old parochial contracts in favour of direct collection, enabling them to keep closer control over the tipping. In general the advantages of controlled tipping are appreciated more fully, but during 1935 the Dursley R.D.C. provided a destructor at the Coaley Sewage Disposal Works.

## EXAMINATION OF FOOD AND DRUGS

The County Analyst submits the following Summary of the work undertaken in 1935.

During the year ending 31st December, 1935, 1,012 samples have been examined under the Food and Drugs (Adulteration) Act, 1928, of which 65 were either adulterated or did not satisfy the various regulations issued under the Act. This represents 6.4% of the number taken, and is the lowest figure for adulteration for the past 11 years. This reduction in the number of adulterated samples is largely due to the reduction in the number of adulterated milk samples referred to below. The following table gives the percentages of adulterated samples for the past 11 years :—

1935	...	6.4%	adulterated
1934	...	10.6%	„
1933	...	12.8%	„
1932	...	12.1%	„
1931	...	8.8%	„
1930	...	8.9%	„
1929	...	8.6%	„
1928	...	10.8%	„
1927	...	15.0%	„
1926	...	12.6%	„
1925	...	10.4%	„

Average for 11 years 10.6%

### MILK.

The number of samples submitted for examination was 681 of which 55 did not satisfy the standard for genuine milk laid down in the Sale of Milk Regulations by the Board of Agriculture. The number of adulterated samples is 8.1% of the number of milk samples submitted and shows a very substantial reduction on the figure for the past two years. In my opinion the reduction is due to the increase of samples taken thus giving your Inspectors greater opportunities in connection with this work. The first result in increasing the number of samples was to bring an increase in the number of adulterated samples found, but eventually the increased vigilance which was made possible has resulted in these decreased figures which when compared with the figure for 1933 namely 17% is very satisfactory. The above figures included samples which are poor in quality but not deliberately adulterated.

The following table gives average figures for the past year together with the averages for 1933 and 1934. These analyses show that the milk produced is well above the minimum standard laid down by the Board of Agriculture for genuine milk. There

were many serious cases of adulteration, and proceedings were instituted in 12 cases and convictions were obtained in 9 cases, the remaining three being dismissed on payment of costs.

		Average for	Average for	Average for	Board of Agriculture Minimum Standard
		1933	1934	1935	
		%	%	%	%
Non-Fatty Solids	...	8.75	8.74	8.79	8.50
Fat	...	3.63	3.57	3.66	3.00
Total Solids	...	12.38	12.31	12.45	11.50

The total amount imposed by the magistrates in fines and costs was £77 6s. 6d.

#### BUTTER.

The quality of butter sold in the County has been good, only one sample being returned as adulterated, and this was in respect of the water content. The sample contained 4.9% more than the maximum amount allowed. Proceedings were taken in this case, and the vendor was obviously only a seller and not a manufacturer therefore the case was dismissed on payment of costs which were £1 5s. 0d.

#### DRUGS.

One sample of Ammoniated Tincture of Quinine contained a slight excess of Quinine Sulphate and was slightly deficient in Ammonia. No proceedings were instituted in this case.

#### JAM.

Six samples were returned as unsatisfactory. In one case the amount of soluble solids was slightly low, and in the other cases the amount of Preservatives slightly exceeded the maximum amount allowed by the Preservative in Food Regulations. None of these cases were considered sufficiently serious to institute proceedings, but these brands will be kept under observation.

#### MALT VINEGAR.

One sample of Malt Vinegar was returned as unsatisfactory. In my opinion this Vinegar had not been brewed entirely from Malt. Proceedings were instituted and after hearing the evidence the Magistrates dismissed the case.

#### BRANDY.

One sample was slightly deficient in Proof Spirit, but not sufficiently serious to institute proceedings.

The samples examined were as follows :—

Articles	Number Examined	Number Adulterated
Milk and Separated Milk ... ..	681	55
Butter, Cream, Cheese & Ice Cream ... ..	61	1
Margarine ... ..	28	—
Spirits and Wines ... ..	2	1
Beer and Cider ... ..	22	—
Non-Alcoholic Drinks, Mineral Waters, and Lemonade Crystals ... ..	30	—
Coffee and Coffee Extract ... ..	9	—
Jams, Marmalade, Gelatine, Honey, Sugar, Sweets and Golden Syrup ... ..	43	6
Drugs ... ..	40	1
Pickles and Sauces ... ..	13	—
Sausages and Polonies ... ..	25	—
Cornflour and Oatmeal ... ..	13	—
Dried, Crystallised and Glacé Fruits ... ..	19	—
Vinegar and Malt Vinegar ... ..	9	1
Mustard and Pepper ... ..	9	—
Dried Mint ... ..	2	—
Glucose, Milk Foods, Dried Milk, and Milk Sugar	6	—
	<hr/> 1012 <hr/>	<hr/> 65 <hr/>

## SURVEY OF DAIRY CATTLE AND BACTERIOLOGICAL EXAMINATIONS OF MILK

In 1935 the County Council decided to appoint a Chief Veterinary Officer who would be assisted subsequently by assistant whole-time Veterinary Officers so that much of the work done in the past by Veterinary practitioners would be undertaken by the whole-time staff.

### REPORTS FROM OTHER AUTHORITIES

During the year 52 reports were received from other Authorities, as follows :

Condition	No. of Reports	Authority reporting
(1) Tuberculosis in Milk	8	Birmingham C.B. 1 ; Bristol C.B. 6 ; Cardiff C.B. 1.
(2) Others :—		
Dirty milks, etc.	44	Bristol C.B. 43 ; Gloucester C.B. 1.
	<hr/> 52 <hr/>	

The numbers reported yearly were :—

		Total		Tuberculosis
1926	...	4	...	1
1927	...	24	...	7
1928	...	23	...	5
1929	...	22	...	12
1930	...	24	...	18
1931	...	17	...	9
1932	...	35	...	19
1933	...	15	...	12
1934	...	30	...	16
1935	...	52	...	8

#### (1) Tuberculosis in Milk.

Inspections of the farms and herds were made by the Veterinary Inspectors in the 8 cases where Tuberculosis was reported in milks produced in this County. At 6 farms, definite evidence of Tuberculosis was established and 10 cows were destroyed ; in the other 2 cases, no definite evidence was obtained.

#### (2) Other conditions.

As regards the dirty milks, etc., reported by other Authorities, inspections were made by the Sanitary Inspectors of the District Councils and samples of milk submitted for bacterial count, etc.

#### BACTERIAL COUNTS.

The number of samples submitted by the Sanitary Inspectors in 1935 was 357.

Over one-half of these gave a total count of under 50,000 micro-organisms per c.c., but 50 contained over one million. The bacillus coli (dirt organism) was absent in 123 samples but present in such a small quantity as 1/100 c.c. in 129.

#### SURVEY OF DAIRY CATTLE.

The survey of milch cattle in the County twice yearly has been in operation for some eight years and the general result is that approximately 4 to 5 per 1,000 animals have tubercular disease in a sufficiently advanced form to be recognizable under the conditions of the survey. This is but a very small proportion of the cattle that have tuberculosis and the numbers developing obvious signs in the interval between the surveys remain fairly stationary.

## MENTAL DEFICIENCY

As mentioned in previous reports, the responsibility for the care of mentally defective persons in this area is shared by three Education Authorities (Cheltenham, Gloucester, and the County), and by the Joint Committee of the County Council and Gloucester Corporation.

The number of persons on the registers of the County Education Committee and of the Joint Committee at the end of 1935 was 1,327. The numbers of new cases coming under notice were :

At schools	...	...	49
Public Assistance records			34
From Nurses	...	...	10
Other sources	...	...	23
			116

44 persons left the County and 25 died during 1935.

In addition to the above there are 143 children, regarded as dull and backward at school under observation : 237 others formerly so regarded are now classified as normal.

The distribution of the 1,327 persons now on the register is :

					<i>Males</i>	<i>Females</i>	<i>Total</i>
<b>JOINT COMMITTEE.</b>							
In Institutions	...	...	...	...	113	113	226
on licence	...	...	...	...	10	10	20
Under Guardianship	...	...	...	...	—	1	1
,, Visitation	...	...	...	...	134	113	247
In Voluntary Homes	...	...	...	...	11	14	25
<b>UNDER PUBLIC ASSISTANCE COMMITTEE.</b>							
In Mental Hospitals	...	...	...	...	54	50	104
In P.A. Institutions	...	...	...	...	77	113	192
At Home	...	...	...	...	34	56	90
<b>CLASSIFIED CASES.</b>							
No special action	...	...	...	...	21	26	47
Children becoming 16	...	...	...	...	46	35	81
Not yet classified	...	...	...	...	63	85	148
					565	616	1,181
<b>EDUCATION COMMITTEE.</b>							
Classified	...	...	...	...	64	40	104
Unclassified children awaiting full examination	...	...	...	...	24	18	42
					653	674	1,327

Of the 246 persons sent to Institutions under Order, 20 were out on licence at the end of the year. The remaining 226 were distributed among the following Institutions :

Ashton House Certified Institution	...	...	1
Brentry Colony	...	...	43
Rampton State Institution	...	...	21
Royal Earlswood Institution	...	...	3
St. Mary's Home, Painswick	...	...	2
St. Theresa's Home, Lewisham	...	...	2
Sandlebridge Certified Institution	...	...	2
Stoke Park Colony	...	...	152
			<hr/>
			226
			<hr/>

The opportunities of the County Council for the care of children of school age have been enlarged by the consideration given by the Managers of Stoke Park Colony to a suggestion that they should apply to the Board of Education for their approval of a part of the Colony for the reception of "educable" children. As a result the Colony was inspected on behalf of the Board and their approval was obtained. The Managers have placed at the disposal of the Education Committee 50 beds for Gloucestershire children. The first cases were admitted on 21st January, 1936.

## REGISTRATION OF BIRTHS, DEATHS AND MARRIAGES

On the issue of the County Review order, the scheme under Section 24 of the Local Government Act, 1929, was revised to include the new boundaries and it is hoped that it will be approved by the Minister of Health at an early date.

## VACCINATION

The summary of the returns of the 25 Vaccination Officers for the past four years is :

	1930	1931	1932	1933	1934
No. of Births	4,812	4,731	4,482	4,275	4,405
No. of Vaccinations	748	756	676	576	567
No. of insusceptibles	10	9	12	11	3
Conscientious objections	3,407	3,391	3,253	3,111	3,192
Died unvaccinated	186	191	163	167	164
	<hr/> 4,351	<hr/> 4,347	<hr/> 4,104	<hr/> 3,865	<hr/> 3,926
Postponement	51	66	45	45	60
Removals	63	63	61	56	91
Untraced	96	84	64	82	73
	<hr/> 210	<hr/> 213	<hr/> 170	<hr/> 183	<hr/> 224
Not yet accounted for	4,561 251	4,560 171	4,274 208	4,048 227	4,150 255

For the first three of these years the proportion of children protected from smallpox by vaccination ranged from 15 to 16 per cent but in 1933 and 1934 the numbers vaccinated dropped to 13.5 per cent. and 12.9 per cent. respectively.

Under the present arrangements it is easier to obtain a certificate of exemption than to secure vaccination, and it is considered in many quarters that more successful results would follow the abolition of the present sham of compulsion—itself probably a stumbling block—and the adoption of a voluntary system of vaccination by the usual doctor of the household.

### **SURVEY OF MEDICAL SERVICES UNDER THE LOCAL GOVERNMENT ACT, 1929**

It was mentioned in the last report that the County Council were considering the appropriation of the Tetbury Public Assistance Institution. This was arranged during 1935 and it was administered by the Public Health Committee as a Council Hospital from 1st October, 1935. Accommodation is available for :

				BEDS
Adult sick persons—	male	...	...	8
	female	...	...	8
				— 16
Maternity cases	...	...	...	20
Infants	...	...	...	10
				—
Total beds				46
				—

### **MATERNITY AND CHILD WELFARE.**

#### **1. NOTIFICATION OF BIRTHS.**

The proportion of births notified within 36 hours of their occurrence was 90.2%. There were 4364 live and still births registered during the year (excluding Cheltenham M.B.) and 3,772 notified, of which 3,227 (85.5%) were notified by midwives and maternity nurses, and 545 (14.5%) by parents and doctors.

#### **2. HEALTH VISITING.**

The following figures are from the returns of the number of visits paid during the year by all undertaking health visiting :

	First Visits.	Total Visits.
(a) To expectant mothers	1,668	14,749
(b) To children under 1 year	3,889	27,631
(c) To children between 1—5 years	—	38,369
<hr/>		<hr/>
	5,557	80,749

There are seven health superintendents and four whole time health visitors in the county service and 137 district nurses undertaking health visiting duties. The 3 health visitors in the Forest of Dean and one in Kingswood area have many more cases on their registers than they can visit as frequently as is desirable, in addition to their other duties. It is hoped that more visiting will in future be undertaken by the extension of Nursing Associations in the Forest of Dean and that an additional visitor will be appointed in the Kingswood and Staple Hill district. A great deal of valuable teaching can be given in the homes which is not met in other directions and specially is this necessary in areas where there is at present no welfare centre or other means for supervision of the children.

### 3. MEASLES VISITING.

During the year 191 cases of measles were nursed at home. The parents are grateful for this service which is of benefit in preventing many of the more serious complications of the disease.

### 4. INFANT PROTECTION VISITING.

The following up of children in registered foster-homes is carried out by a visit each month. In most cases the homes and foster-mothers are very satisfactory and the care given to the children is excellent but occasional difficulties arise and more frequent visits are required.

Number of foster-parents on the Register, 1 Jan., 1935	121
"    "    "    "    "    "    "    "    31 Dec., 1935	130

38 new foster-parents were registered during the year.

Number of children on the Register, 1 Jan., 1935	148
"    "    "    "    "    "    "    "    31 Dec., 1935	176

83 new children were placed in homes during the year.

### 5. ADMISSIONS TO HOSPITAL.

#### (a) *Maternity Cases.*

The demand for admission to hospital for confinement continues to increase. In the majority of the cases considered by the committee there were definite medical reasons for the application but there is also a group of cases in which the people have recently moved to new housing estates and have no friends or relations to look after them—the Committee have taken a sympathetic view of such patients and approved their admission and in most of these cases the full amount of the hospital fee has been paid.

During the year 254 cases were approved for admission, the reasons being as under :—

OBSTETRIC					
Contracted pelvis	...	...		36	
Abnormal presentation	...	...		26	
Toxaemia	...	...		55	
Other complications	...	...		67	
					184
MEDICAL	...	...	...	...	18
HOME CONDITIONS	...	...			32
PUERPERAL PYREXIA	...	...			20
					<u>254</u>

(b) *Infants and Young Children.*

There was an increase in the number of cases of debility referred to hospital for treatment. In many homes suitable care and feeding cannot be given to the child who requires extra supervision but such children make good progress under hospital conditions.

The number of admissions year by year are as follows :

			Rickets, debility, etc.	Ophthalmia Neonatorum.
1930	...	...	17	2
1931	...	...	17	3
1932	...	...	9	7
1933	...	...	23	2
1934	...	...	15	6
1935	...	...	29	6

6. CONSULTANT OPINIONS.

The Committee are anxious that practitioners should take advantage of this service whereby the attendance of a specialist is available in complicated cases. Several doctors have asked for the consultant during the year and in some cases it has been necessary to remove the patient to hospital for the treatment required.

The numbers year by year are :

1930	...	...	14
1931	...	...	15
1932	...	...	8
1933	...	...	7
1934	...	...	8
1935	...	...	15

7. ASSISTED MILK SUPPLIES.

The need for milk and additional nourishment is very great particularly in certain areas of the county where most of the applications are considerably below the scale on which free milk is granted. Each application is authorised by the Chairman and the majority of cases attend welfare centres so that close supervision is ensured of the child and mother to whom milk is supplied.

	1930	1931	1932	1933	1934	1935
Number of new applications	489	596	602	756	763	849
Number of renewals	3,233	4,427	3,583	3,088	3,371	3,716

## 8. NURSING HOMES REGISTRATION ACT, 1927.

There were 26 homes under supervision at the beginning of the year. One new home was registered during the year for 2 general cases and there have been several changes. The matron of one home died and the home was given up, one was transferred to Gloucester County Borough, three homes were given up as sufficient patients were not available and one nurse moved to a new home which was subsequently registered. At the end of the year, therefore there were 22 Homes on the Register.

## 9. MATERNITY AND CHILD WELFARE CENTRES.

(a) *Pre-natal centres.*

In May, 1935, the County Council approved of a new arrangement whereby patients booking midwives for their confinement should have ante-natal examinations by their own doctors. This has been well received by midwives and patients and saves the women a considerable amount of time in travelling and attendance at clinics. It was therefore found that certain of the established ante-natal centres could be closed as their need was met in this other direction and consequently the centres at Berkeley, Tewkesbury and Fairford were closed during the year. To meet the needs of a large rural area, however, a centre was opened at Northleach in June. The attendances at the centres at Cinderford, Lydney and Soundwell have kept up in spite of the domiciliary service and will be kept open as useful educational work is done there in addition to the medical examinations. A large number of women attend the centres in Gloucester, Cheltenham and Bristol who are to be admitted to the various hospitals in those towns for their confinements. There is still a disinclination for the mothers to attend for post-natal examination and stress has been laid on the importance of this at all centres during the year.

The following summary records the work of all centres during the year.

Number of new patients at County centres :			
	pre-natal	...	313
	post-natal	...	16
Number of old patients	...	...	66
			<hr/> 395
Number of new patients, other centres			168
			<hr/> 563
Total Attendances at County Centres :			
	pre-natal	...	672
	post-natal	...	79
			<hr/> 751
Number of patients seen by Doctors from			
May 1st, 1935	...	...	774

(b) *Child Welfare Centres.*

There are now 49 welfare centres in the county, new centres having been opened at Barrington, Bibury and Rodborough during 1935. The Federation of Welfare Centres have prepared a panel of talks and the educational side of the work is much improved. Federation meetings have been held in various parts of the county during the year which has greatly increased the interest of members in the various centres. The attendances are good, especially of the older children : in many places special sessions are devoted to the examination of children between 2 and 5 years of age and it is hoped that this will show in the improved physique of the children when they enter school.

Total attendances at all centres :

(a) by children under 1 year of age ...	12,943
(b) by children over 1 year of age ...	17,537

Total number of children attending centres at end of year :

(a) under 1 year of age... ..	1,024
(b) over 1 year of age ... ..	2,297

10. DENTAL TREATMENT.

The routine dental clinics continue to do good work for mothers and children under 5 recommended for treatment by doctors, nurses or from centres. An additional clinic was opened during the year at Wotton-under-Edge.

*Summary of dental work :*

			Mothers.	Children.	Total
Number of new cases	...	...	190	70	260
Number of attendances	...	...	786	82	868
Number of Anaesthetics :					
	general	...	260	74	334
	local	...	80	76	156
Number of dentures completed		...	73		73

11. EDUCATIONAL WORK.

(a) *Travelling Health Exhibition.*

In the spring the exhibition visited 9 villages in the districts of Moreton-in-Marsh, Stow-on-the-Wold, and Weston-sub-Edge and, in the autumn, 10 villages around Bourton-on-the-water and Fairford. This is now the second visit to many places and it is gratifying to find that many people come again having remembered the exhibition in the past and show great interest. The attendances at the evening sessions are very good, a large number of men and boys being present.

*(b) Lectures and Addresses.*

The Women's Institutes continue to show interest in health subjects and 10 single talks were given to institute meetings, seven of them being in the evenings. A series of three talks of general health matters has been arranged and three institutes have asked for the series during the year. It is likely that the demand for this series will be extended in 1937 and it becomes increasingly difficult to find a sufficient supply of speakers. In addition talks are given at Welfare Centres, 12 having been given by the Maternity and Child Welfare Medical Officer during the year and 4 addresses to other bodies.

*(c) Post-graduate Course.*

A special course lasting one week was arranged during the year for midwives and nurses in the county. Stress was laid on the importance of practical work and opportunity was given for midwives to attend clinics in the city and observe the routine work. This course was well attended and much appreciated by the nurses.

A course was held for domestic science teachers and members of Women's Institutes at the Royal Agricultural College, Cirencester. Lectures were given on all aspects of domestic science in the home and visits were arranged to cottages to see the types of country dwellings. This course was an experiment and proved a success.

## 12. ADMINISTRATION OF THE MIDWIVES' ACTS.

## Provision of Midwifery Services :

The position at the end of 1935 was as follows :

## Number of practising midwives :

Trained (a) Working for Associations	...	186	
(b) Private	... ..	61	
Untrained—Private	... ..	6	
		—	253

## Number of Parishes :

(a) Covered by district nurse midwives	...	...	301
(b) Covered by Independent midwives	...	...	5
(c) With no certified midwife	...	...	1
Number of registered births (live and still)	...	...	4,364
Number of cases attended by certified midwives	...	...	2,479
Percentage of births attended by certified midwives	...	...	56.8
Number of cases requiring medical help	...	...	1,314
Percentage of midwives cases requiring medical help	...	...	53

	Nos. of D.N.A. Parishes		Area in acres	Population
MIDWIFERY SERVICES.				
1. By District Nurses :				
(a) Assocns. affiliated to Glos. C.N.A.	... 128	297	751,503	270,487
(b) Assocns. affiliated to other C.N.A.	... 2	2	1,581	1,089
(c) Assocns. not affiliated	1	—	—	—
2. By Independent Midwives ...				
	... —	5	14,028	8,572
3. No certified Midwives				
	—	1	1,719	93
<hr/>				
Total Administrative County excluding Cheltenham M.B.	131	305	768,831	280,241

From the above statement it will be seen that the county is provided very satisfactorily with midwifery services through the District Nursing Associations. A new association was formed at Bitton during the year which covered an area previously unprovided. Owing to financial difficulties the association of Cranham and Sheepscombe was unable to continue but it is hoped that other arrangements will soon be made for the district. The largest unprovided area is in the Forest of Dean where there are a number of independent midwives but where nursing associations are still required.

#### KING EDWARD MEMORIAL NURSES.

Nurses maintained from the King Edward Memorial Fund were called on for emergency duty for 70 weeks 1 day, and holiday duty 17 weeks. Additional relief nurses were supplied for 119 weeks and 2 days.

#### CONFINEMENTS ATTENDED BY CERTIFIED MIDWIVES.

There was a higher number of registered births during the year and a greater proportion was attended by midwives. Several of the cases that had booked a midwife were sent to hospital for confinement on account of some abnormal condition which developed during pregnancy or labour and the midwives were paid a compensation fee of 10/- in these cases. In over half the cases medical help was sent for by the midwives under their rules. The importance of pre-natal care is now becoming appreciated by the patients as well as the nurses and the examination by the doctors who will be called in should an emergency arise is of great value.

## Summary of notices received from midwives.

			1934		1935
Notification of Intention to practise			309		297
Numbers of Confinements attended					
by Midwives	...	...	...	2,489 (50.9%)	2,479 (56.8%)
		Number	Percentage	Number	Percentage
			of all cases.		of all cases.
MEDICAL HELPS.					
Mother	{ Pregnancy	219		264	
	{ Labour ...	781	44.2	790	46.6
	{ Lying In...	101		103	
Baby	...	187	7.5	157	6.3
Death	{ Mother ...	2	0.07	2	0.08
	{ Baby ...	31	1.2	18	0.72
Still Births	...	51	1.9	54	2.1
Artificial Feeding		44	1.7	49	1.6
Source of Infection		105		165	
Laying out of dead body		20		40	

## PUERPERAL PYREXIA.

During the year midwives called in medical help for 62 of their cases suffering from rise of temperature during the puerperium for any cause. Of these cases 14 were notified by the doctors as puerperal pyrexia and in addition 29 patients were notified where doctors were in attendance, making a total of 43 notifications. Fourteen of these patients were removed to hospitals under the Council's arrangements and six were already in hospital and the nursing completed there. Three of the cases died but in the remainder recovery was completed after varying periods of stay in hospital.

## MATERNAL MORTALITY.

During the year 18 mothers died from causes directly attributable to pregnancy or confinement or associated with these conditions—this is a maternal mortality rate of 4.1. Eleven of the patients died in hospitals and seven died at home. Every effort is made to prevent these calamities and facilities are available throughout the whole of the county for hospital treatment, specialist consultations and ambulance services. In many of the cases unfortunately the patients themselves will not carry out the advice given and do not take advantage of the services provided. A full report is taken of each case and this routine has the advantage of discussing the case from all its aspects with the medical attendant and the midwife concerned. There is still an element of fear fostered, particularly in young mothers, by the publicity given to cases of maternal mortality and much education is needed to overcome this.

## Summary of cases :

Number of deaths (a) at home	...	...	7
(b) in hospital	...	...	11
Number of patients delivered.			
(a) at home	...	...	8
(b) in hospital	...	...	9
Number of patients undelivered	...	...	1
Causes of Death.			
Puerperal sepsis	...	...	3
Toxaemia	...	...	2
Haemorrhage	...	...	3
Shock	...	...	2
Embolism	...	...	2
Abortion	...	...	2
Associated Medical Conditions	...	...	3
Ectopic gestation	...	...	1

## DISCHARGING EYES.

Midwives gave notice that in 61 of their cases there was some discharge from the eyes of the young baby. Medical help was called in every case and the majority of the cases were slight and recovered rapidly with simple treatment. Ten cases were notified as the more serious condition of ophthalmia neonatorum and 2 babies were removed to hospital. All these children completely recovered without any permanent injury to the eye. One baby died at the 5th week but this was in no way associated with the eye condition.

## STILL BIRTHS.

There were 182 still births during the year—being 4.1% of the total births. In some cases the mothers had suffered from illness during pregnancy which may have been a factor in the inability of the child to be born alive. There is a marked degree of anæmia present in many of the mothers and this undoubtedly affects the nutrition of the baby.

## SPECIAL VISITS AND INSPECTIONS.

Routine visits to the midwives are paid by all the Inspectors during the year when the registers and bags and appliances are inspected and visits are paid with the nurses to their cases. This gives opportunity for teaching and instruction which is appreciated by the midwives. 756 such visits have been paid during the year. In addition 208 visits have been made for the purpose of enquiry into special cases on which more detailed information is required.

1935.  
TABLE I.—RATES, ETC.

DISTRICTS.	Estimated Population.	BIRTHS.		DEATHS.			
		Total.	Rate	Total.	Rate.	Under Total	one year. Rate.
URBAN :							
Charlton Kings ...	4,834	67	13.9	67	13.9	6	89
Cheltenham ...	51,140	636	12.4	681	13.3	22	35
Cirencester ...	7,980	96	12.0	103	12.9	2	21
Kingswood ...	13,930	190	13.6	161	11.6	11	58
Mangotsfield ...	12,550	182	14.5	149	11.9	8	44
Nailsworth ...	3,226	48	14.9	49	15.2	1	21
Stroud ...	8,490	109	12.8	104	12.2	6	55
Tewkesbury ...	4,460	50	11.2	56	12.6	—	—
Total U.D. ...	106,610	1,378	13.5	1,370	12.9	56	41
RURAL :							
Cheltenham ...	15,489	208	13.4	220	14.2	10	48
Cirencester ...	11,830	173	14.6	139	11.7	4	23
Dursley ...	13,550	205	15.1	168	12.4	7	34
East Dean ...	19,270	336	17.4	243	12.6	20	60
Gloucester ...	22,058	339	15.4	266	12.1	13	38
Lydney ...	10,550	162	15.4	95	9.0	4	25
Newent ...	7,280	105	14.4	98	13.5	5	48
North Cotswold ...	15,445	254	16.4	192	12.4	13	51
Northleach ...	7,506	109	14.5	76	10.1	3	28
Sodbury ...	25,170	388	15.4	294	11.7	7	18
Stroud ...	27,150	348	12.8	388	14.3	12	34
Tetbury ...	6,010	81	13.4	60	10.0	2	25
Thornbury ...	18,160	282	15.5	230	12.7	11	39
Warmley ...	8,980	122	13.6	103	11.5	3	25
West Dean ...	17,942	328	18.3	196	10.9	16	49
Total R.D. ...	226,390	3,440	15.2	2,768	12.2	130	38
Administrative County	333,000	4,818	14.5	4,138	12.4	186	39

TABLE II.  
NOTIFIABLE INFECTIOUS DISEASES.—1935.

DISTRICT.		CASES.												TOTAL.
		Diphtheria.	Erysipelas.	Scarlet Fever.	Enteric Fever.	Puerperal Fever.	Puerperal Pyrexia.	Cerebro-Spinal Meningitis.	Polio-myelitis.	Ophthalmia Neonatorum.	Pulmonary Tuberculosis.	Other Forms of Tuberculosis.	Pneumonia.	
<b>URBAN :</b>														
Charlton Kings	...	—	1	2	—	1	1	—	—	3	3	2	—	13
Cheltenham	...	35	15	36	1	1	13	—	1	6	45	18	21	192
Cirencester	...	2	2	18	—	—	—	—	—	1	—	7	—	30
Kingswood	...	28	9	61	—	—	2	1	—	—	19	5	—	125
Mangotsfield	...	9	2	19	—	—	—	—	1	—	8	4	3	46
Nailsworth	...	—	—	19	—	—	2	—	—	1	1	—	—	23
Stroud	...	—	—	23	—	—	1	—	—	—	4	—	3	31
Tewkesbury	...	6	2	4	—	2	—	—	—	—	3	1	—	18
Total U.D.	...	80	31	182	1	4	19	1	2	7	84	31	36	478
<b>RURAL :</b>														
Cheltenham	...	3	1	14	—	—	2	—	—	1	8	2	3	34
Cirencester	...	6	3	54	1	—	—	—	—	—	4	2	4	74
Dursley	...	40	6	1	—	1	—	—	—	1	15	4	22	90
East Dean	...	14	3	14	—	—	4	—	2	3	15	23	8	86
Gloucester	...	6	2	7	7	—	3	—	—	2	23	11	15	77
Lydney	...	28	1	51	—	—	—	—	1	—	7	4	19	112
Newent	...	20	2	6	—	—	—	—	—	—	1	—	7	36
North Cotswold	...	12	3	13	—	2	4	—	28	—	13	4	11	91
Northleach	...	1	3	9	1	1	1	—	—	—	1	2	4	23
Sodbury	...	5	10	63	2	—	3	—	—	1	20	18	9	131
Stroud	...	4	3	21	1	—	2	—	—	—	28	8	4	71
Tetbury	...	—	—	38	—	—	—	—	—	—	—	2	—	40
Thornbury	...	41	1	48	—	—	3	—	—	—	12	8	26	139
Warmley	...	6	1	18	—	—	—	—	—	—	4	—	3	32
West Dean	...	23	4	62	3	1	7	—	4	1	21	12	16	154
Total R.D.	...	209	43	419	15	5	29	—	35	9	172	100	151	1190
Admin. County		289	74	601	16	9	48	1	37	16	256	131	187	1668

TABLE III. 1935.

L.G.B. TABLE III

CAUSES OF AND AGES AT DEATH.

CAUSES OF DEATH		All ages.	Under 1 yr.	1-2 yrs.	2-5 yrs.	5-15 yrs.	15-25 yrs.	25-35 yrs.	35-45 yrs.	45-55 yrs.	55-65 yrs.	65-75 yrs.	75 and over
1.	Typhoid and paratyphoid ...	4	—	—	—	—	—	—	1	2	1	—	—
2.	Measles ...	7	—	2	2	—	1	1	1	—	—	—	—
3.	Scarlet Fever ...	8	—	—	1	2	—	—	2	1	—	1	1
4.	Whooping Cough ...	4	2	—	1	1	—	—	—	—	—	—	—
5.	Diphtheria ...	7	—	—	—	6	—	—	—	—	1	—	—
6.	Influenza ...	74	4	—	—	2	3	1	3	4	15	21	21
7.	Encephalitis Lethargica ...	10	—	—	—	—	1	2	1	2	2	1	1
8.	Cerebro Spinal Fever ...	3	—	—	2	—	—	—	—	1	—	—	—
9.	Tuberculosis of respiratory system ...	158	—	—	—	—	29	51	28	24	21	5	—
10.	Other Tuberculous Diseases ...	43	3	4	1	6	7	5	3	8	4	2	—
11.	Syphilis ...	4	2	—	—	—	—	1	1	—	—	—	—
12.	General paralysis of the insane, Tabes dorsales ...	9	—	—	—	—	—	1	2	3	3	—	—
13.	Cancer, malignant disease ...	532	—	—	—	2	3	8	20	76	138	156	129
14.	Diabetes ...	67	—	—	—	3	2	—	1	5	12	24	20
15.	Cerebral Haemorrhage ...	254	—	—	—	—	—	2	3	21	43	64	121
16.	Heart Disease ...	1152	1	—	1	2	4	10	15	66	142	366	545
17.	Aneurysm ...	16	—	—	—	—	1	—	1	3	3	6	2
18.	Other Circulatory Diseases ...	227	—	—	—	—	—	4	1	8	23	73	118
19.	Bronchitis ...	104	4	—	—	3	—	—	1	7	6	22	61
20.	Pneumonia (all forms) ...	160	13	9	—	4	2	6	6	12	24	33	51
21.	Other Respiratory Diseases ...	46	—	—	2	1	1	1	7	8	8	9	9
22.	Peptic Ulcer ...	40	—	—	—	—	1	5	6	11	9	4	4
23.	Diarrhoea etc. ...	15	4	2	2	—	—	—	—	—	3	—	4
24.	Appendicitis ...	28	—	—	—	2	4	4	2	5	5	3	3
25.	Cirrhosis of Liver ...	11	—	—	—	—	—	—	—	1	2	4	4
26.	Other diseases of Liver, etc. ...	27	—	—	—	—	—	1	2	—	5	9	10
27.	Other digestive diseases ...	87	4	1	—	3	—	1	9	16	21	14	18
28.	Acute and Chronic Nephritis ...	148	—	—	1	1	3	4	6	17	31	43	42
29.	Puerperal Sepsis ...	9	—	—	—	—	1	5	3	—	—	—	—
30.	Other Puerperal Causes ...	10	—	—	—	—	2	3	4	1	—	—	—
31.	Congenital Debility, Premature birth, Malformation etc. ...	129	125	2	—	—	2	—	—	—	—	—	—
32.	Senility ...	153	—	—	—	—	—	—	—	—	1	18	134
33.	Suicide ...	41	—	—	—	—	2	8	7	9	5	6	4
34.	Other violence ...	157	4	3	7	11	15	20	21	12	15	17	32
35.	Other Defined Diseases ...	380	20	3	3	16	19	22	26	41	68	85	77
36.	Cause ill-defined or unknown	14	—	—	—	1	—	—	—	—	3	6	4
Total		4138	186	26	23	66	103	166	183	364	614	992	1415

